



Assessment of Plymouth's demand for student Houses of Multiple Occupation (HMOs) and Purpose Built Student Accommodation (PBSA) in the context of de-studentification and Article 4 direction

Burrows, Kevin MSc CGMA ACMA FHEA BA(Hons)

1st October 2018

This report represents the work submitted to the faculty as evidence of completion of a postgraduate degree requirement at the University of Reading Real Estate MSc.

Abstract

This study assesses the impacts of the growing number of purpose-built student accommodation blocks (PBSA) in Plymouth, UK during a time of decreased student numbers and restrictions on the creation of Houses of Multiple Occupation (HMOs) on the student housing market. Plymouth City Council are keen for HMOs to go back to being household dwellings, enabling mixed communities and assist their target of a five-year land supply in the city. The growth of PBSA in the city at a time when student numbers are in decline is unprecedented and there is very little literature explaining such a phenomenon. This study assesses what is happening within the market by interviewing key stakeholders within Plymouth, such as a student estate agent, student landlords, landlord groups (associations), University of Plymouth, Plymouth City Council, and local councillors. The findings of this study are that PBSA is a key factor in giving students more choice within the student accommodation market, but will find it difficult to persuade second and third year students to give up their HMOs. Secondly the process by which PBSA will displace HMOs is not entirely straightforward, the process whereby a HMO turns back to residential is beset with issues around conversion costs and the fact that former HMO property used as a dwelling will not only fall in value, but will lose its use-class and may struggle to regain it subsequently due to Article 4 Direction restrictions. The impact of Article 4 Direction is not greatly researched and this document attempts to open up discussion about the benefits and limitations of such restrictions.



You are free to:

Share — copy and redistribute the material in any medium or format.

The licensor cannot revoke these freedoms as long as you follow the license terms.

Under the following terms:



Attribution — You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.



NonCommercial — You may not use the material for commercial purposes.



NoDerivatives — If you remix, transform, or build upon the material, you may not distribute the modified material.

No additional restrictions — You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits.

Notices:

You do not have to comply with the license for elements of the material in the public domain or where your use is permitted by an applicable exception or limitation.

No warranties are given. The license may not give you all of the permissions necessary for your intended use. For example, other rights such as publicity, privacy, or moral rights may limit how you use the material.



Contents

Abstract	0
Contents	2
Figures	4
Tables	5
1. Introduction	6
1.1. Aims and Objectives	6
1.2. Background	7
1.2.1. Research Problem	7
1.2.2. Student numbers in Plymouth	7
1.2.3. Student Accommodation Plymouth	9
2. Literature review	10
2.1. Change in government policy leading to higher student numbers and demand for student accommodation	10
2.1.1. Student number growth and economic benefit	10
2.1.2. Student number decline	10
2.1.3. Declining student numbers and impact on university finances	11
2.2. Challenges faced by student accommodation providers	11
2.2.1. Increase use of Student HMOs	11
2.2.2. HMO town vs gown conflict	12
2.2.3. Plymouth introduced an Article 4 Direction to remove permitted development to create HMOs	13
2.3. De-studentificaton of HMOs in Plymouth	14
2.4. Increased supply of PBSA from private providers	15
2.5. Research Questions	18
3. Methodology	19
3.1. Methodology Introduction	19
3.1.1. Overview	19
3.1.2. Epistemological philosophies	19
3.1.3. Previous methodologies	19
3.2. Research Design	20
3.2.1. Data	20
3.2.2. Ethics	21
3.2.3. Validity and reliability	21
3.2.4. Sampling	21
3.2.5. Analysis	22



3.2.6.	Limitations	22
4.	Discussion	23
4.1.	Perceptions of Plymouth HE Student numbers	23
4.2.	Introduction of Article 4	24
4.2.1.	Perceived impact of Article 4	24
4.3.	PBSA	26
4.3.1.	PBSA increase in supply	26
4.4.	Increased accommodation choice - PBSA vs HMO/flats	27
4.4.1.	De-studentification	33
4.4.2.	De-studentification and location	36
4.4.3.	Student density of M & N Sector Codes 2014 & 2018	37
4.5.	PBSA and the city centre	41
4.5.1.	PBSA Town and Gown Conflict	41
5.	Conclusion	43
	References	46
	Appendices	52
1.	Appendix 1 – Map of Plymouth area and three higher education institutions	52
2.	Appendix 2 - Student PBSA Plymouth	53
3.	Appendix 3 – Map of central student area	54
4.	Appendix 4 - Local Authorities that have Article 4 directions restricting HMOs	56



Figures

Figure 1 - Student number increase and decrease - Higher Education Students in Plymouth from 1995-6 to 2016-7 data from HESA (2018)	8
Figure 2 - Plymouth Area covered by Article 4 direction with sector codes (Plymouth City Council, 2013b)	13
Figure 3 - Towards a process-based conceptualisation of de-studentification (Kinton et al., 2016) ...	14
Figure 4 – 2008-2018 Great Britain Pound (GBP) to United States Dollar (USD) £1 to \$1 Chart (XE Currency, 2018).....	17
Figure 5 - All Full-time Higher Education students in Plymouth (UoP, Marjon & PCA)- Term time accommodation (HESA, 2018)	28
Figure 6- Overseas HE full time students - Term Accommodation choice (HESA, 2018).....	29
Figure 7- EU/UK Non-first-year HE full time students - Term Accommodation choice	29
Figure 8- 1st year Full-time Higher Education students in Plymouth (UoP, Marjon & PCA)- Term time accommodation choice (HESA, 2018)	30
Figure 9 - Towards a process-based conceptualisation of de-studentification (Kinton et al., 2016) ...	33
Figure 10 – Sector codes of Council tax properties with category N & M exemption 2014 and 2018 (Data from Plymouth City Council)	37
Figure 11– Sector codes Plymouth City Council Tax N & M register 2014 & 2018 (Data from Plymouth City Council)	38
Figure 12 - 2014 and 2018 Number of M & N exemptions per sector in Plymouth	40



Tables

Table 1 – Student number decline by percentage from peak - Plymouth Student numbers 2010-11 to 2016-17 (HESA, 2018)	8
Table 2 – PBSA Plymouth summary (Appendix 2)	9
Table 3 - Percentage change in student numbers per University Group from 2010-11 to 2016-17 (HESA, 2018)	11
Table 4 – Interviewees list with titles for discussion section.....	22
Table 5 – Sector codes for PBSA beds built (existing), recently built and those under-construction 2018 (Appendix 2).....	39



1. Introduction

1.1. Aims and Objectives

The Plymouth area saw substantial student numbers grow from the late 1990s until a peak in 2011. During this time there has been a significant increase in the number of student Houses of Multiple Occupation (HMO). This study aims to understand perceptions of key stakeholders in student accommodation of the impact of rapidly declining student numbers, and rapidly growing Purpose-Built-Student-Accommodation (PBSA) provision, on Plymouth student HMOs. Added to this, Plymouth has introduced an Article 4 Direction, which “enables the Secretary of State or the local planning authority to withdraw specified permitted development rights across a defined area” (Ministry of Housing and Communities & Local Government, 2014). Plymouth’s concerns about a high concentration of HMOs within the city centre, particularly student HMOs, resulted in an Article 4 Direction removing permitted development rights to change use class from C3 dwelling to a C4 small HMO without planning permission (Plymouth City Council, 2013a).

The aim of this paper is to open up discussion around the topic of de-studentification within Article 4 areas and hopes to contribute to a better understanding of HMO landlord behaviour and the urban planning environment. The research used takes a mixed method approach to assess how HMOs previously created in the boom years are now reacting to lower student numbers, Article 4 Direction and the added competition from PBSA. Broadly, the findings indicate that even though student HMO demand has declined, student HMOs are slow to be returned to residential dwellings, decisions about change of use could be postcode specific. Landlords may even have perverse incentives not to change house use back, due mainly to supply side constraints created by Article 4. This work reviews the literature around higher education policy and the impacts on areas with high concentrations of student HMOs.



1.2. Background

1.2.1. Research Problem

The research problem focuses on perceptions of how the student HMO landlords react to rapid changes in demand (student numbers) and increased supply of student accommodation (PBSA) within an Article 4 area. The type of HMO in question are small HMOs, which are houses with three or more unrelated persons. Planning permission is required to change a dwelling (C3) to a small HMO (C4). The study may refer to large HMOs (more than 6 unrelated persons), but as these already require planning permission under sui genesis planning rules (do not fall within any use class) it is not the focus of this work.

The planning consideration is of particular interest in the study as landlords wanting to purchase and develop a dwelling into a small HMO now require planning permission and under Article 4 only 25% (under-review to be reduced to 10%) of houses in 100 meters are allowed to be a HMO. This means that if you want to create a student HMO near the city centre and campus, your chances of being successful (due to already high concentration of HMOs) are now lower. Existing HMO landlords are now left with a problem, with lower student numbers and increased competition from institutions creating PBSA, what do you do with an already established HMO with granted planning? The council allows you to change your small HMO (C4) back to a dwelling (C3) with no issue so you can then rent it to a family, where there is significant demand (Plymouth City Council, 2014). However, once you do this, you lose your small HMO (C4) planning and if student numbers increase in future, you will require planning permission to return the house to HMO use. This has added another dimension, not covered well in the literature, to the investment decision making of landlords who own student HMOs and their possible desire to maintain the planning permission for the long-term at the sacrifice of short-term returns.

1.2.2. Student numbers in Plymouth

The City of Plymouth, Devon, UK is in the South-west on the coast. It has three higher education (HE) institutions; the University of Plymouth (UoP) and Plymouth College of Art (PCA) are both located in the city centre and the University of St Mark and St Johns (Marjon) is located four miles to the North of the city centre (Appendix 1). The majority of HE students live within walking distance of the student entertainment area, North Hill which is next to the city centre, UoP and PCA. The students tend to live in Plymouth or in smaller towns in Cornwall and South Hams.

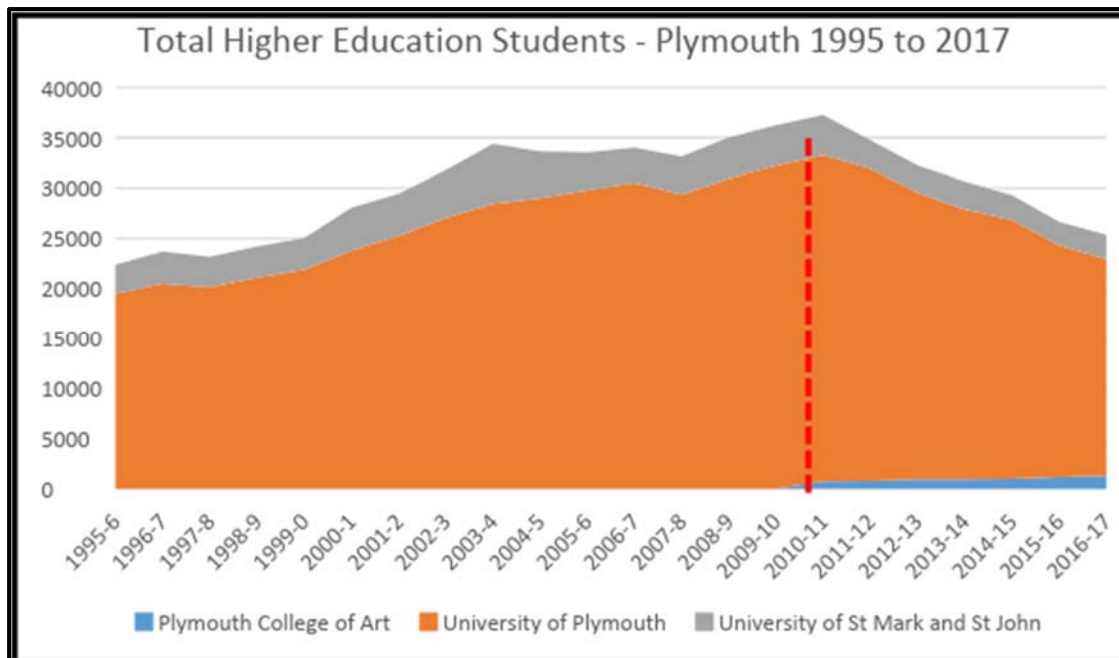


Figure 1 - Student number increase and decrease - Higher Education Students in Plymouth from 1995-6 to 2016-7 data from HESA (2018)

The data in Figure 1 from the Higher Education Statistics Agency (HESA), student numbers grew hugely from the late 1990s to 2011, but have since fallen sharply. Much has been written on the studentification process during the late 90s, but not so much on de-studentification, which is when students move out of areas. The main study of de-studentification was based in Loughborough, but the student number drop in that case was less rapid than is now being seen in Plymouth. Loughborough hit its lowest levels at 15,460 in 2012-13, from its peak at 2006-7 17,015, which represents a 10% change or 1,555 beds. Whereas Plymouth has seen a 31.9% decrease overall and over a shorter time period, which is a difference of potentially 10,855 beds. Furthermore, Loughborough is a market town whereas Plymouth is a city with a different population, economic activity and housing need.

	Established	Student numbers 2010-11 (Peak)	Student numbers 2016-17 (Current)	Percentage change
University of Plymouth	1862	32,500	21,645	-33.4%
University of St Mark & St John	1923	4005	2415	-39.7%
Plymouth College of Art	1856	770	1315	+70.8%
Total		37,275	25,375	-31.9%

Table 1 – Student number decline by percentage from peak - Plymouth Student numbers 2010-11 to 2016-17 (HESA, 2018)

In addition, over the same period of decline shown in Table 1, supply side restrictions have arisen; Article 4 Direction and PBSA expansion has taken place. This study seeks to understand what happens to the student housing market when numbers change at such a rapid pace.



1.2.3. Student Accommodation Plymouth

In 2011-12 only 5% of students in Plymouth were housed in PBSA, resulting in 55% seeking private HMOs/flats (Savills, 2013). At that time this was one of the lowest provisions of PBSA in the country. Currently, UoP has transferred its stock to UPP, and offer nominations to other PBSA. Marjon still have its PBSA on campus. At present the estimated PBSA is as follows (A full breakdown of these figures are contained in appendix 2):

	Beds	Total Beds
Existing	5420	
Recently complete	933	
Total beds Ready Sept 2018		6,353
Under-construction	853	
Total beds ready Sept 2019		7,206
Approved Planning	1,430	
Potential Plymouth PBSA		8,636

Table 2 – PBSA Plymouth summary (Appendix 2)

The increased PBSA bed numbers during such a significant drop in student numbers is unprecedented in the UK and the student market perceptions of such changes needs to be analysed.

2. Literature review

2.1. Change in government policy leading to higher student numbers and demand for student accommodation

2.1.1. Student number growth and economic benefit

Government policy on Higher Education (HE) has had a marked effect on the number of students enrolling at HE institutions (Raco and Imrie, 2003). Blair's view in the late 1990s was the need to support education. In the 1990's the UK was transitioning to a knowledge economy (Watson, 2007) and Tony Blair's government (British Political Speech, 1996) targeted 50% of school leavers to go on to university (Toynbee and Walker, 2001).

The expansion of HE was not coupled with a government initiative to build student accommodation (Hughes and Davis, 2002) so the increased demand was largely met by private HMOs (Smith, 2002). Students preferred to be within walking distance of the main campus and student entertainment, with a high preference for close proximity (Chan et al., 2011; Eshelby, 2015; University of Nottingham, 2008). This led to a substantial increase in HMOs close to university campuses around the UK (Kenyon, 1997). Plymouth arguably saw a greater dependency on HMOs than many areas (Savills, 2013).

It is estimated that students inject around £300 million per annum to the Plymouth economy (Santander and Clever Student Lets, 2016). Plymouth has experienced reduced funding from national government (Glanville, 2017; Moore, 2018; O'Leary, 2018) and with students as economic actors, promoting economic activity, strong student numbers are crucial to the city. Students have been referred to nationally "as consumers and as commodities", where commodity refers to "something of use, advantage or value" (Levin, 2005, p. 13).

2.1.2. Student number decline

Student numbers peaked in Plymouth 2010-11. Recent government HE policies around student fees, removal of number caps, at Russell group universities in particular, and the decrease in funding streams are reversing past growth (Fazackerley, 2018; Moran and Powell, 2018). The removal of the number caps, which was aimed at increasing competition in HE (BIS, 2016), could be viewed as most damaging to middle-lower ranked universities such as those in Plymouth (Adams and Hall, 2018).

University league tables are now used by students to make their degree choice (Walshe, 2007), resulting in institutions trying to improve their ranking (Hiely-Rayner, 2015). One way to boost the ranking is to admit students with a higher UCAS entry tariff (Turnbull, 2018), which is a long-term plan for some, irrespective of the short-term drop in student demand.

2.1.3. Declining student numbers and impact on university finances

The Government believes that universities should compete with one another (Boxall, 2016) and has withdrawn some financial funding for universities (Paton, 2010). Increased student tuition fees have replaced these funds (Coughlan, 2017). Students can now behave like consumers, forcing universities to compete for their business. In the long-run recruitment of students will prove important to offset government cuts. Growth/decline in numbers varies by university groups:

	2010-11	2016-17	% Change
Russell Group	570,140	632,015	+11%
1994 Group	147,680	154,360	+5%
Other	761,655	729,820	-4%
Alliance	671,560	539,210	-20%
Million Plus	316,390	247,880	-22%

Table 3 - Percentage change in student numbers per University Group from 2010-11 to 2016-17 (HESA, 2018)

Such turbulence in the HE sector is not only troubling to universities, local councils, but also to housing providers, who find it difficult to forecast accommodation needs. Furthermore, the number of 18 year olds is forecast to fall by 80,000 in the UK by 2020 and will not recover to 2015 levels until 2024 (UCAS, 2015).

2.2. Challenges faced by student accommodation providers

2.2.1. Increase use of Student HMOs

Cities where universities saw growth in student numbers, without creating sufficient campus hall space relied on the private rented sector. Plymouth was dominated by HMOs due to high student numbers in the past and an under-supply of PBSA (Savills, 2013). This resulted in a drastic change in wards surrounding main campuses throughout the UK, and Plymouth was a good example of that process. Investors purchased available houses that were within walking distance of the University campus and turned them into HMOs (Hubbard, 2008; Thomsen and Eikemo, 2010).

The increase of the student HMOs in and around universities in the UK resulted in many residents including low income families being pushed out during the late 1990s and 2000s (Hubbard, 2009) and replaced by predominately middle class students able to afford higher rent (Chatterton, 2010a). This process was labelled, 'studentification' and saw unbalanced neighbourhoods form with a majority of students (Allinson, 2006; Smith, 2008) destabilising communities with the proliferation of HMOs (Smith and Holt, 2007).

Plymouth had a high demand for student accommodation in certain wards, such as Drake ward, next to UoP & PCA, which had 54.7% full-time students (2011 Census) compared to the UK national average



of 4.4% (Office of the Director of Public Health, 2013). At this time Plymouth only had 1,762 PBSA beds in all wards. This resulted in Plymouth having a high dependency on private flats/HMOs (Savills, 2013), especially close to campus as students are, “unwilling to rent beyond established areas” (Rugg et al., 2000, p. 19). So some areas close to campus saw extreme HMO creation as more mature students preferred these (Bailey, 2009; Holdsworth, 2009; Smith and Holt, 2007).

The demand for accommodation coincided with an increased appetite for property investment and with the increased availability of finance for property investors (Gibb and Nygaard, 2005). This resulted in a greater number of investors, seeking high and stable yields offered by students, able to access the housing market (Rhodes and Bevan, 2003).

2.2.2. HMO town vs gown conflict

High concentrations of students within small areas resulted in well documented ‘town and Gown’ conflicts to do with noise, rubbish creation and parking for local residents (Bowden et al., 2011; Chan et al., 2011; Curtis, 2015; Eshelby, 2015; Holton, 2015; Ike et al., 2017; Kenna, 2011; Rugg et al., 2000; Sage et al., 2012; Smith, 2004). This started to become a political issue and unhappy residents formed local, then national lobby groups against the HMOs and the displacement of local family homes (Tyler, 2008). “The Lobby therefore opposes concentrations of HMOs in general (as a unique threat to the sustainability of communities) and studentification in particular (as the principal cause and effect of HMO concentrations)” (National HMO Lobby, 2018).

The national government, concerned with a mono-community near universities being created, wanted to encourage mixed communities by changing legislation. The change was to control HMO creation on 1 October 2010, impacting the creation of lets to groups of sharers (3 to 6 unrelated occupiers). Previously dwellings (C3 use class) could be converted to HMOs under permitted development. The change in legislation (Town and Country Planning (General permitted development) (England) Order 2015, 2015), came in two parts. Firstly, small HMOs were no longer classed as C3 dwellings, a new use class was introduced for small HMOs (up to 6 unrelated occupiers): C4, small HMO. Secondly, legislation change under Article 4 Direction, allowed councils to stipulate conditions in their local planning policies, removing permitted development rights to change C3 to C4 homes without a planning application. Generally, this resulted in councils aiming for no more than 20% HMOs in a certain radius (RLA, 2012).

2.2.3. Plymouth introduced an Article 4 Direction to remove permitted development to create HMOs

Out of 353 councils, 59 (Appendix 4) have enacted the Article 4 (Town and Country Planning (General permitted development) (England) Order 2015, 2015) restriction (RLA, 2018) as at September 2018. There is almost no research on the impact of Article 4 Direction on the student accommodation provision within university towns and cities. It is worthwhile highlighting that the Direction does not reduce HMOs per se, but it reduces the number of HMO conversions in HMO-dense areas. Plymouth City Council enacted Article 4 in the city centre and surrounds in 2012 after public consultation, and the following area is covered by it:

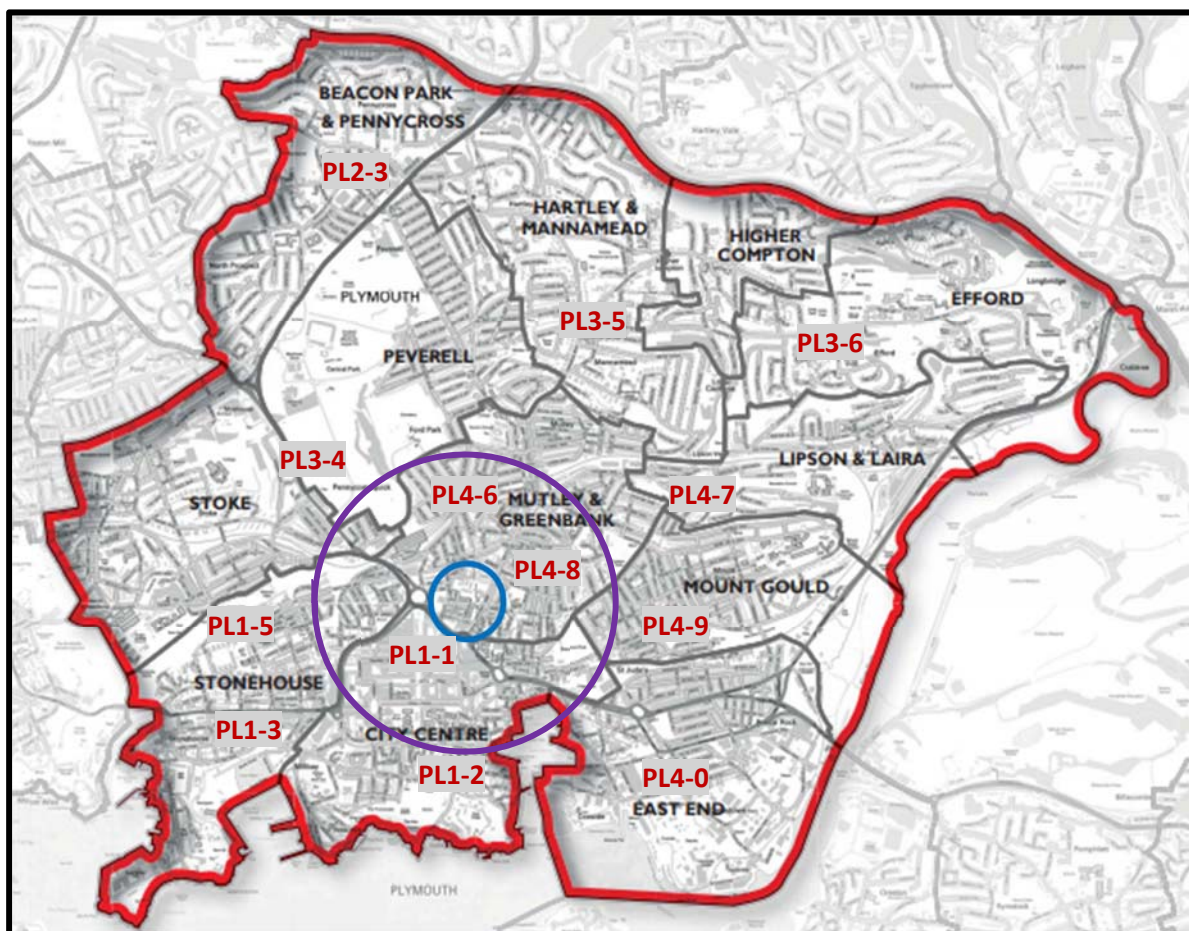


Figure 2 - Plymouth Area covered by Article 4 direction with sector codes (Plymouth City Council, 2013b)

The large size of the area is to discourage HMOs appearing at the edge. The radius of the purple circle represents the 15-minute walk to UoP and PCA campuses. Plymouth has chosen a quantitative measure for the maximum number of HMOs allowed within the above area: “a threshold of 25% is an appropriate ceiling to maintain balanced communities” (Plymouth City Council, 2013a, p. 34) within a 100 metre walking distance (not as a radius), which is the definition of a community according to

Plymouth City Council (2013a). However, under Plymouth City Council and South Devon’s Joint Local Plan (West Devon Borough Council et al., 2017, p. 242) this percentage is to be reduced from 25% to 10%. This amendment was submitted to the Secretary of State 31 July 2017 and is currently under review.

2.3. De-studentification of HMOs in Plymouth

Although there is no research on government HE policy and student housing there is a small amount of research into the process of de-studentification (Kinton et al., 2016; Ruiu, 2017; Sage et al., 2012). Kinton et al. (2016) identified a process of de-studentification, but this is based mainly on the market town of Loughborough, which has not experienced the rapid fall in student numbers witnessed in the Plymouth. Furthermore, Plymouth as a city has a range of housing needs and this may play a part in the de-studentification process. This study aims to understand student accommodation market actors’ perceptions and seeks to critique this process against actors’ views in a city location with an Article 4 Direction:

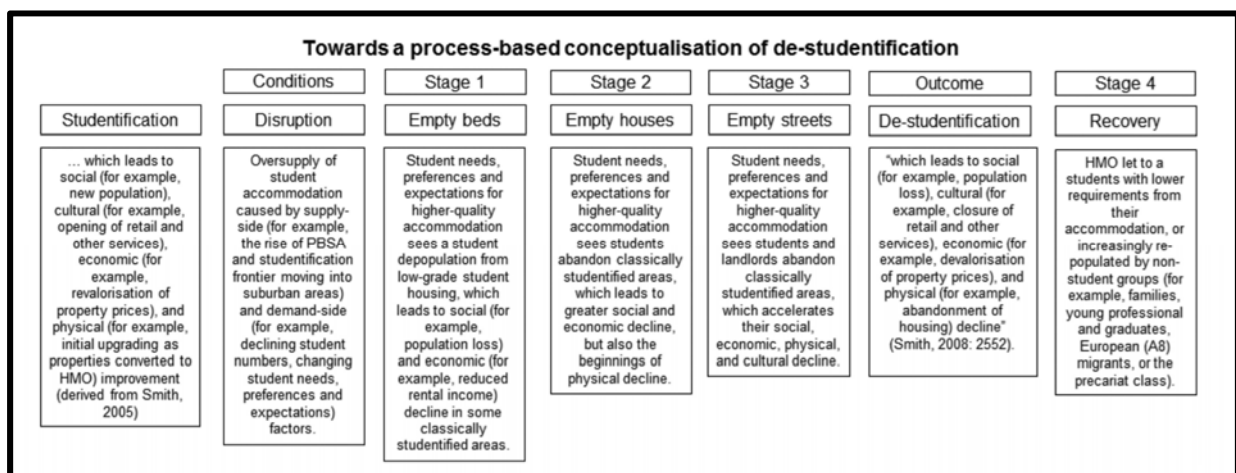


Figure 3 - Towards a process-based conceptualisation of de-studentification (Kinton et al., 2016)

Land supply figures are a requirement of the National Planning Policy Framework (2018) and the rules allow PBSA, though not a housing need group, to be added to land-supply data. The basic calculation is set out in the guidelines for councils in identifying appropriate land to meet development needs (Ministry of Housing, 2014). Councils can use total beds created divided by average students per HMO to establish land-supply figures, which in Plymouth was 3.79 beds per HMO (Plymouth City Council, 2017). Councils are particularly focused on land-supply data because if they do not meet land supply targets then it becomes more difficult to reject developers’ planning applications for added development.



There are no restrictions on HMOs (class C4) converting to dwellings (Class C3), but there are concerns about how frequently this is happening, if at all.

It is unclear whether Plymouth is trying to reduce HMOs in general or to stop further HMO creation. The Joint Local Plan (West Devon Borough Council et al., 2017), is certainly against HMO over-concentration because of the various problems it causes.

However, it is not clear whether the council is attempting to reduce all HMOs or only student HMOs.

2.4. Increased supply of PBSA from private providers

Plymouth council note that PBSA completed and under-construction will lead to “more than 7,749 bed spaces in PBSA – which is an increase of more than 40% on the current number” (Plymouth City Council, 2017, p. 15). Such an increase will mean greater accommodation choice for students.

Plymouth have an interest in PBSA development at least in part because PBSA assists in meeting its land-supply commitment. Article 4 restrictions on permitted development of C4 HMOs has created opportunities for alternative student accommodation providers. PBSA developers like to invest in towns that have these types of restrictions as it reduces competition (Ashreena, 2017). Furthermore, PBSA developers are encouraged to cite Article 4 when applying for planning permission (British Property Federation, 2018; JLL, 2017), suggesting that the UK could free up as many as 77,000 homes by creating PBSA to displace HMOs.

Universities UK, (2006, p. 50), argue that PBSA “often provides higher standards of accommodation for students, adding to the competitive attractiveness of the particular HE institution” and bring significant sustainability benefits to a town as PBSA tends to be close to campus, reducing the student need for transportation.

PBSA development may lead to reduced demand for student HMOs. PCC suggest that landlords may change their focus to one of the city’s other housing needs (Plymouth City Council, 2014):

- i. Smaller dwellings for younger and older people
- ii. Housing suitable for households with specific needs
- iii. Three and four-bedroom houses, and executive homes

Development Policy 7 (West Devon Borough Council et al., 2017).

First year students are more likely to choose PBSA than those in later years for a number of reasons. First years are less likely to know the area or the alternatives in terms of costs, or have sufficient maturity to live on their own, so are likely to make ‘snap decisions’ about booking accommodation (Hubbard, 2009, p. 1918). First year students also like PBSA because it seems unthreatening, clean,



comfortable and, in spite of the higher costs, it offers hassle-free living (Hubbard, 2009). One further consideration is that in the new competitive university environment, students are using clearing to negotiate places later in the process (Harding and McLennan, 2017) and an abundance of PBSA helps facilitate this late decision making. HMOs vary greatly and need to be viewed, which may not be practicable for many first-year-students.

First year students give the reason for choosing PBSA as “making friends” 71% and 82% wanting PBSA because it provides “the student experience they both expected and desired” (Holton, 2015, p. 119). In Plymouth “typically, students are less likely to remain in PBSA after their first year of study” (Plymouth City Council, 2017). It is not just Plymouth; in Nottingham there is a “natural progression and a desirable step in gaining personal independence and maturity” (University of Nottingham, 2008, p. 7).

Pricing is considered to play a part in student decisions whether to give up an HMO for PBSA, and this will be explored in this study. Plymouth council has estimated there are 10,837 HMO beds and 6,701 PBSA beds (built and under-construction), totalling 17,538 beds in 2016-17 (Plymouth City Council, 2017). It is not clear how many students are seeking accommodation, but in 2016-17 there were a total of 9,310 (Removing all HE students in Plymouth not living at home or in their own home) new HE students (HESA, 2018), meaning that students now have greater choice. In addition, students who usually needed to move out of accommodation after their first year may now be able to stay in PBSA in their second year if they wish. This larger volume of supply of PBSA may result in less pressure on Plymouth’s student HMOs.

PBSA has its issues. As Bowden et al., (2011), noted there are concerns that have been raised about placing large numbers of international students in PBSA as doing so reduces engagement with the local community that may benefit from interactions with diverse groups. Furthermore, PBSA sometimes creates less “interaction amongst peers living in the apartments, but also wider society”(Fincher and Shaw, 2009, p. 1891). PBSA are known to target international students, who see “a currency advantage in coming to the UK to study if you’re an overseas student”(Curry, 2017).

Whether PBSA is being created to meet demand is questionable in Plymouth. Ernst and Young ask if PBSA is being created because it matures into an acceptable investment class asset (Ernst & Young, 2016, p. 1) “In 2015, the sector experienced unprecedented investment volumes, with c. 75,000 PBSA beds transacting at a total value of c. £5.9bn, double the volume seen in 2014” (Ernst & Young, 2016, p. 2), showing there is real appetite to develop, certainly whilst currency exchange rates remain favourable:



Figure 4 – 2008-2018 Great Britain Pound (GBP) to United States Dollar (USD) £1 to \$1 Chart (XE Currency, 2018)

A weakening pound could have played a part in the UK PBSA expansion, “More than 70% of investment is coming from overseas buyers, from sovereign wealth funds and ultra-high net worth individuals (people with investable assets of more than \$30m) and private equity.” (Simmonds, 2017).

There has been research into studentification and de-studentification, but so far there is no research into the impact on student housing in areas where student numbers have dropped so rapidly, where significant PBSA development is taking place and where Article 4 restrictions apply. In addition, Plymouth, unlike where some of the other research was carried out, is a city with a substantial housing need (Plymouth City Council, 2014) and this should suggest that alternative uses for any displaced HMOs should be readily available.



2.5. Research Questions

The principal research question is: what is perceived to happen to student HMOs, when there are significant supply and demand shifts over a short period of time, with added HMO supply side restrictions (Article 4)?

This study will assess three areas for investigation and the results from each question below will help to explain the changing face of the student accommodation market in Plymouth.

- a) What are the perceptions around the impact of lower student numbers on the Plymouth student accommodation market?
- b) What is the view of the relationship between the introduction of Article 4 in Plymouth and the student housing market?
- c) How is the increase in PBSA within Plymouth perceived by actors in the student accommodation market?

The answers will ultimately lead to a judgement on whether the process of creating additional PBSA and the restrictions of HMO creation is helping to free up HMOs for alternative uses within the city.

3. Methodology

3.1. Methodology Introduction

3.1.1. Overview

The methodology employed for this study are based on a mixed method. Quantitative data has been sourced from HESA and Plymouth City Council and qualitative data was gained from key actors within the student accommodation market in Plymouth.

This section will identify the various epistemological philosophies and arguing for which is more relevant to answer the research questions in section 2.5. Following this, previous methodologies used in the area will be assessed with a determination of research design for the study.

3.1.2. Epistemological philosophies

From the epistemological philosophies, there are broadly two side of the spectrum that will be discussed. The extreme philosophies are interpretivism and positivism (Collis and Hussey, 2014). Positivism is formed in natural science, whereas interpretivism has closer links to social science, which is more in-line with this research. When establishing which philosophies are most appropriate, it is worthwhile noting that Hassard and Kelemen, (2002) suggest that there is no exact research paradigm set as standard for a certain area.

Literature has identified that combining both qualitative and quantitative (Bryman, 2003; Bulmer, 1986; Hammersley, 2016; Maxwell, 1992; Yin, 1984) improves validity. However, some have viewed that combining such approaches as incompatible (Burrell and Morgan, 1979; Miles et al., 1994).

Quantitative researchers collect facts, study them and their relationships, which usually involves the study of data (Punch, 2005). Qualitative researchers are assessing individuals and perspectives (Punch, 2005). The area also is the study of human beings and how they operate within the area, such as Estates Agents, councils, landlords etc, they all involve human behaviour.

3.1.3. Previous methodologies

Most of the previous work in this area involved a mixed method approach with many focusing just on qualitative data (Hubbard, 2009; Kinton et al., 2016; Sage et al., 2012; Smith, 2002). The main reason for this is the limitation of the data available on student housing decisions and the supply within such markets. Houses by their very nature are individual and could be generally highly comparable, but no two houses could be considered identical, ranging in quality, space/size, facilities and location. Therefore, against data quality measures (Completeness, Timeliness, Validity, Accuracy, and



Consistency), supply data on the types of student houses is poor and only represents the position on the day on which it is collected.

Looking at purely quantitative data does not gain an in-depth insight into the housing market and the decisions of humans under a potential de-studentification process. Therefore, looking purely at data has not been the method of any of the previous studies and was used as complimentary to qualitative work. Studies have used a variety of qualitative techniques, with those that focus on students leaning more towards interviews, and those leaning more towards market conditions employing interviews. As Bryman and Bell (2015), suggest using questionnaires can be limited as there is not the opportunity for elaboration. Considering the complexity of the area in this study and the number of actors and perspectives semi-structured Interviews will enable the richest understanding of the perceptions in the Plymouth students housing market.

3.2. Research Design

It was clear that quantitative data used in this study would be insufficient considering the data limitations surrounding property and its characteristics, and the fact that data is at a point in time, usually an academic year so does not give enough information. Therefore, data will be used along with qualitative data, in the form of semi-structured interviews. This approach should improve the reliability and validity of the analysis and conclusions that are drawn.

3.2.1. Data

Quantitative data is available from Higher Education Statistics Agency (HESA, 2018) and shows student accommodation choice annually and gives an overview of all three HE universities within Plymouth. The reason for using this data set rather than data from a university is due to the fact that housing demand within the city centre comes from more than one university. This data shows choice from all HE providers and student choice over a period of almost ten years, and can be used to see the impact of PBSA supply.

Council tax data will also be sourced with the formal consent from Plymouth City focusing on category N & M exempt properties used by students. This data is limited on the basis that it only shows locations by sector code on the 1 April each year, but does help to analyse any de-studentification process and the impact the more specific Plymouth area.

Finally, due to limitations of housing data, qualitative work will provide the missing perceptions on the impact of or the occurrence of de-studentification within the Plymouth area.



3.2.2. Ethics

Ethics approval was gained from the Real Estate and Planning school at the University of Reading and all areas were complied with.

Data from the Higher Education Statistics Agency (HESA, 2018) is provided for public use.

Council Tax data was supplied, and prior consent was gained from Plymouth City Council to use such graphics of the data changes in exemption codes. The data was suitably anonymised and no individual's property details were provided, thus no data protection issues were apparent.

Formal informed consent was signed by all interviewees to agree to be involved with the study and the use of their comments. Their answers were suitably anonymised to protect their identity within the study.

3.2.3. Validity and reliability

The research is focused on the perspectives of individuals on the changes within the student housing market under different conditions around demand and supply. The views captured in the interviews are valid on an individual basis, but they only represent the views of key players in the Plymouth student housing market, so findings can't be generalised to the UK or further afield. The data that comes from the Higher Education Statistics Agency (HESA, 2018) has high validity. The student number change captured in the data could be considered the independent variable in the study, and it is the impact that this is having on the other variables within the student accommodation market.

3.2.4. Sampling

According to Henry, (1990), a sample size is needed to be capable of producing estimates of behaviour. Population sampling should be a subset of the population in question as a way of understanding the general population. However, the study needed to generate understanding within a small area of Plymouth student accommodation, so any sort of probability sampling would have proved ineffective. Therefore, a non-probability method was sought to be most effective, and due to the specialist knowledge, that was required.

Judgement sampling was the only method that could have been used for such a select people who have the following characteristics (Ben-Shlomo et al., 2013);

- involved in student accommodation currently
- Have experience with students and understand their accommodation preferences
- have at least six-seven years of experience in student accommodation to cover the increase and decrease in student numbers



- Knowledge of the changes in legislation on student HMOs
- Familiar with all three universities and their student numbers

Interviewees were selected and ranged in age and gender. Individuals were selected from an identified group with the above characteristics in the following perspective groups:

	Interview area	Interviewee	Interviewed
1	University	University of Plymouth student accommodation (largest university in study)	Yes
2	Estate agent	Established local student estate agent	Yes
3	Surveyor and landlord	Plymouth Chartered surveyor and student landlord	Yes
4	Landlord group	Landlord association representing views from over 800 Plymouth landlords	Yes
6	PCC	Plymouth City Council Planning	Yes
7	Councillor(s)	Two Past or current councillor in Plymouth	Yes

Table 4 – Interviewees list with titles for discussion section

3.2.5. Analysis

The interviewees were transcribed by the author and thematic coding was carried out. All themed comments were then placed together and analysed.

3.2.6. Limitations

Apart from data limitations, already discussed, there were limitations in the ability to gain access to certain individuals from my interviewee group. Significant efforts were made to gain views from PBSA developers and PBSA site managers, but unfortunately these did not occur and thus must be considered a limitation of this study. It is believed that PBSA developers may feel the topic under assessment is sensitive when there are concerns about under-occupancy. As large organisations, any comments may be seen as a market signal and could impact on investors and current planning applications. PBSA site managers are reluctant to discuss the topic in question, due to a lack of knowledge around HMOs and issues around permission to discuss topics under their current employment.

4. Discussion

4.1. Perceptions of Plymouth HE Student numbers

HESA (2018) student numbers data in Plymouth shows a drop in student numbers and may be to do with the removal of the number caps with universities that are “lower ranked institutions have largely seen a fall in student numbers since 2012” (Cushman & Wakefield, 2018, p. 6). According to the interviews the lower student numbers were certainly being felt by the HMO market, but interviewees were not convinced that PBSA has made a significant difference to the HMO sector:

“Student numbers have rapidly declined and trying to estimate housing is difficult” (Landlord-group)

“I used to have 27 students in my properties. I have a mixed-portfolio so I can afford to be and I follow the market. I have no student accommodation at all now” (Landlord-group)

“They’re selling them off as they are finding it difficult to let them. Whilst numbers are dropping and PBSA has been built, there is a glut of accommodation and they are finding it more difficult to rent, so probably that has swayed their decision” (University)

It seems that the change in higher education policy has had an impact on student recruitment in Plymouth and is resulting in wards that were typically studentified becoming de-studentified. The signs of the de-studentification process (Kinton et al., 2016), start with empty rooms or even empty houses. Some landlords were changing who they rent to and others deciding to leave the business altogether. One thing that recurred in the interviews is that not all landlords are in-tune with the property investment market, with reports of them hanging on, in the hope things will improve as long as their mortgage was covered:

“over the twenty-eight years or so I've been in the housing market I have seen peaks and troughs in accommodation with additional investors coming in, never many investors going out, but the yields becoming less and less” (Landlord-group)

This would point to many landlords considering quitting the student HMO rental market but, strangely, lower student numbers and increased competition (PBSA) has not changed market sentiment:

“there’s no returns from banks, pensions unless you are in civil service or some way is that even secure. So people are looking for somewhere to put their money” (Landlord-group)



“They have mortgages to meet. Three students paying rent out of five meets those mortgages then they're looking forward to a capital gain, which they're unlikely to get” (Landlord-group)

The interviews made it sound that the term ‘landlord’ was a collective term for a huge array of individuals varying in experience and exposure to the housing market. However, On the whole landlords have not reacted quickly to changing market demand and could be seen as generally optimistic towards long-term housing investment. It seemed acceptable that when houses were under-let, or unlet, landlords focused on the long-term anticipated capital gain from property.

4.2. Introduction of Article 4

An objective of this study has been to establish the impact of the introduction of Article 4 and how this was felt by the individuals involved in student accommodation. The interview with the PCC highlighted concerns of over-concentration of HMOs and the resulting impact on community and local services. Students were talked about and the concern was for what happens in the summer months when students are not around, and there is a high concentration of potentially unused houses. Article 4 was introduced to control the over-conversion of family dwellings into HMOs. This falls very much in-line with the national (National Planning Policy Framework, 2018) motivation towards mixed communities.

4.2.1. Perceived impact of Article 4

How this was experienced in the student accommodation market was felt initially by a large increase in HMOs just before the Article 4 regulation came into force, but so far this can't be corroborated in data, so can only be viewed as having limited validity.

“the amount of HMO accommodation probably went up that year and it was all brand-new, people bought residential stock and done it all up. So, there was a massive glut of brand-new HMO property that came to the market in the summer of 2012” (Estate Agent)

“you increase the price of housing of the Article 4 granted houses” (Landlord-group).

“Article 4 is hugely damaging to residential tenants for example Addison road, Blenheim Road, Marlborough Road [just off of North Hill], which probably 80% of which is students with a few little bastions of residential accommodation in there. Nobody's going to buy houses there because you can't turn it into student accommodation, no one is going to buy it to live in it, so they've trashed the [C3 dwelling] value.” (Estate Agent)



This theme came up in the interviews with individual investors and Landlord-groups that gave perspectives on behalf of their over 500 members in Plymouth. The regulation that was introduced to control HMO creation may have actually resulted in some houses (C3 dwellings), including those residents battling for a reduction in HMOs within their neighbourhood, are now worth less and more difficult to sell because of Article 4.

Another area that needed exploring is what happens to houses in Article 4 areas that are most affected by falling student numbers, those houses that are not being let to students? Couldn't those houses be let to residential tenants? This was shown as not appealing to investors as they appeared to do anything possible to get some rent coming in to cover their mortgage and try and keep the valuable C4 planning permission:

“The short-term return will be lower, because if you've got a five bed with three students paying £400/month each, you get £1,200/month. The local housing allowance for a four bed is £830/month.” (Estate Agent)

“Greenbank, if you a four bed on Mildmay street, as a building to live in it, its worth, £170k, if you put five students in it, its worth £235k (£47k x 5rooms). So if you own that house, A; you are not going to take lower rent and B; trash the value of your house by moving in the family of four.” (Estate Agent)

“[under-renting] I know some agents do it. If the property is empty you pay council tax, if you have a full-time student in property then it is exempt from council tax.” (Estate Agent)

“8 bedroom properties, if you can get 5-6 rooms let, you're probably still getting a yield of 4 or 5%.” (Landlord-group)

It becomes apparent that having C4 usage permission within an area with Article 4 has more significant value than the impact of short-term lower rental returns, so landlords will strive to maintain their planning permission. This is demonstrated by HMOs in Article 4 areas, in the city with lower student numbers and huge PBSA development, holding their value:

“HMOs, I suspect the demand to buy them will decrease, which you would think would decrease the price, but it hasn't up to now and there's certainly an oversupply but the prices have remained relatively stable. The slack in the market has been taken up by Eastern Europeans. Brexit might well have an effect,” (Landlord-group).



This ultimately means that landlords who can't rent to students will first look at the sharer market as this means they can keep their planning permission as a C4 HMO. This is de-studentification as described by Kinton et al., (2016).

One other area, that came from the discussions, was that the HMO lobbying was for a decrease in HMOs (mainly student HMOs) due to mainly noise and behaviour issues (Chatterton, 1999; Christie et al., 2002, 2002; Horton and Kraftl, 2013; Hubbard, 2008; Munro et al., 2009; Northey, 2006) may be changing, but is this due to Article 4?

“Noise is not so bad these days these days I ring environmental health and they will get a noise abatement order served on the house on the first occurrence” (Estate Agent)

“students have changed. Noise is better, houses don't get trashed the way they used to five years ago now” (Estate Agent)

There appears to be a change in students, but this could be due to anti-social behaviour legislation and the fact that now more first-year-students (who could be viewed as the most sociable group (Hubbard, 2009)) are being mainly housed in PBSA and not in the community. If this is true, does Plymouth need to use Article 4 Direction to control HMOs as less demand will naturally displace HMOs previously used by first year students? However, as students have such a high preference for close proximity, letting the free-market create HMOs will likely turn all streets in the immediate vicinity of the student area into HMOs, and this will become a student's zone, and will suffer from the issues faced with vacancy in the summer.

4.3. PBSA

4.3.1. PBSA increase in supply

With the Article 4 control of the expansion of HMOs, Institutions are eager to build PBSA. However, even though interviewees agreed that first year students like PBSA, most were confused as to why they were still building it when student numbers had fallen. This gives a sense that those within the student market feel that PBSA may be in over supply. The interviewees, many believing in free market economics felt that the council should stop PBSA development in the city, but the council can only use their policies to defend the city's needs:

“we can actually count [PBSA beds] towards all five-year land supply because we're displacing students out of HMOs and then that HMO is effectively being freed up for a house or two



houses or three flats if it's a large one [Non-student] HMOs are meeting a housing need.”
(PCC)

“there will be an oversupply and I think those yields will become negative yields” (Landlord-group).

“We are staggered that they are doing it, someone is not doing due-diligence.... The issue is what they will do with it when they've got four students because they'll be knocking on the council's door saying we want to turn it into a hotel or something else.” (Estate Agent).

However, considering that there are 10,000 individuals on the waiting list for housing in Plymouth, there is a housing crisis and first year and international students taking up houses could be seen as unhelpful. Whether these houses are converted into the types of homes needed is another question, but with Article 4 class C4 established planning worth so much to the landlord there is reluctance to move into residential dwellings as this would decrease the value of the home and decrease rental returns.

When questioned about whether PBSA was in over-supply the council explained their position, and cited that Dev 12 (West Devon Borough Council et al., 2017) has provision for challenging developers to demonstrate demand, but this is yet to be accepted by the Planning Inspectorate. However, this comment from the council explains that they are doing what they can within the policies they have:

“Anybody can apply for anything at any time all we can do is assess the applications that come in against our policies that's why we need to make sure our policies are tight so that nothing just slipped through or goes under the radar which is why we do extensive consultation” (PCC)

The council appear to be pushing developers already to think about the needs of the city, but need to adjudicate on the applications they receive. If they receive an application and it does not match as housing need in the city, they work with developers to identify the need:

“we would be talking to them based on our housing needs assessment where we identify who's got a housing need in the city” (PCC)

4.4. Increased accommodation choice - PBSA vs HMO/flats

Years of development of HMOs and the ensuing interest and development of PBSA has left lower student numbers in Plymouth and greater choice. It was felt important to assess whether this had an impact on students' accommodation choice and whether PBSA has become more popular compared



to private HMO/flats, as there were comments in the literature about PBSA being better quality in general for student accommodation (Stevenson and Askham, 2011).

When looking at the data, there does appear to be some structural shift in demand, but it is not clear what is driving this. It appears from the data that the preference for PBSA is growing (red area in Figure 5) and that for private student HMOs/flats is decreasing (green area in Figure 5):

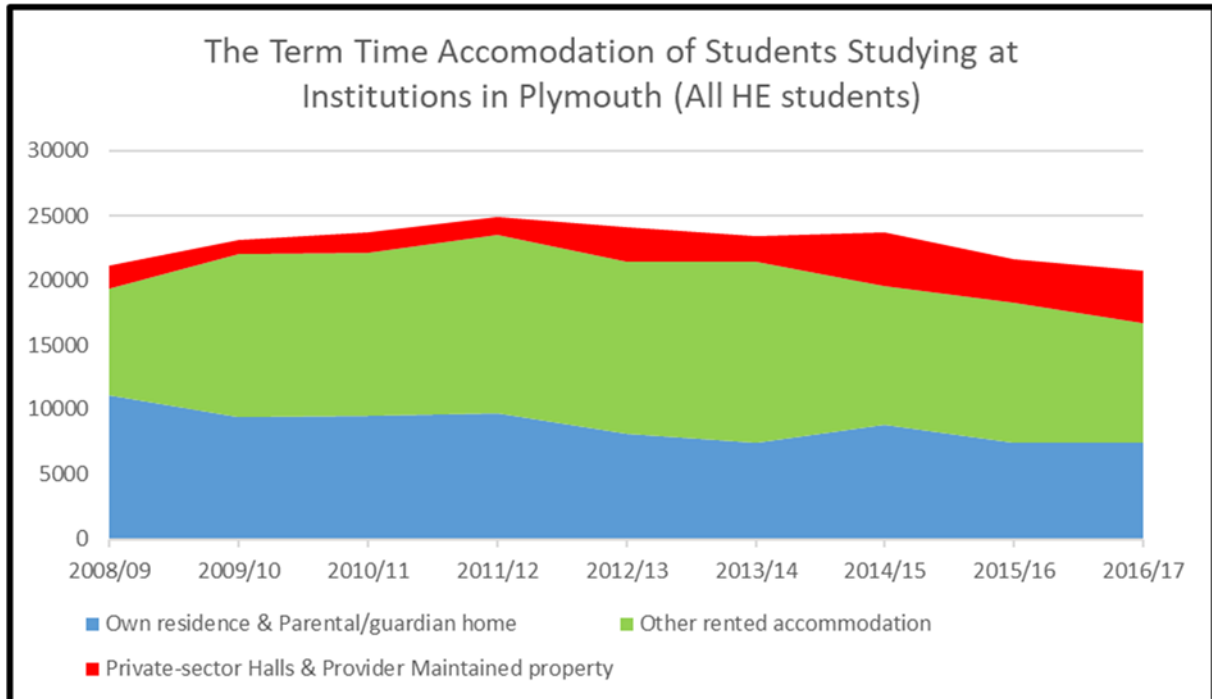


Figure 5 - All Full-time Higher Education students in Plymouth (UoP, Marjon & PCA)- Term time accommodation (HESA, 2018)

This demonstrates that when PBSA (Private sector halls and Provider maintained property) is increasing in Plymouth as an accommodation choice, a group of students are choosing it over private HMOs/flats. Whether this is demand from first years, international students, or another group needs assessing.

Firstly, does the demand come from international students as cited by Ernst & Young, (2016)? In Plymouth the number of international students has dropped and this needs to be considered:

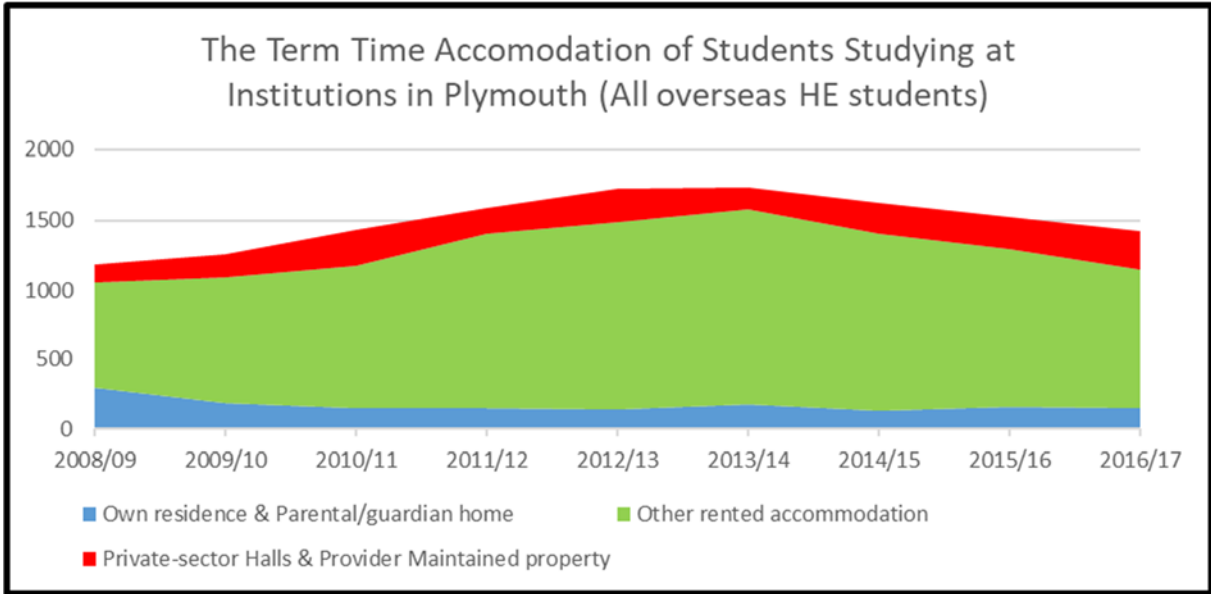


Figure 6 - Overseas HE full time students - Term Accommodation choice (HESA, 2018)

The answer is that demand for PBSA as an accommodation choice proportion is the highest ever, but international students are lower. In 2008/09 only 10% of international students were housed in PBSA and now it is 19%. Another group that PBSA developers cite as their area for growth is students beyond year one, but according to the data this does not seem to be the case and this is strongly corroborated by the interviews carried out:

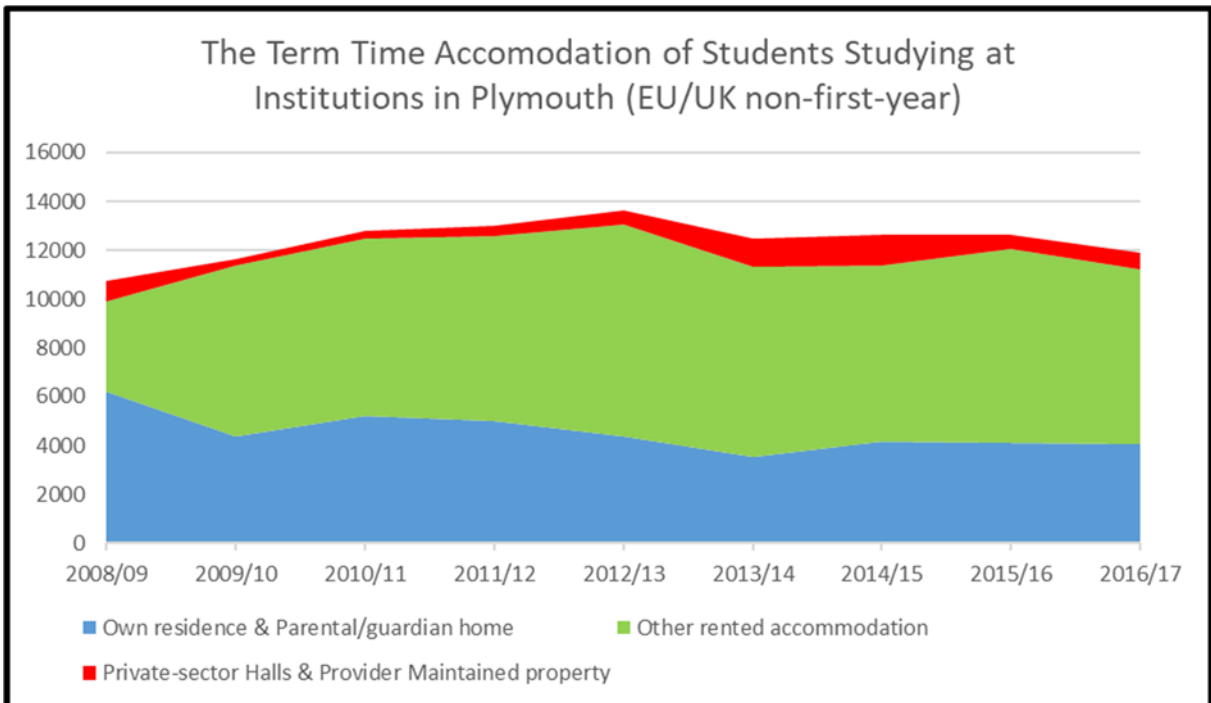


Figure 7- EU/UK Non-first-year HE full time students - Term Accommodation choice

When assessing the data, the overwhelming demand for PBSA compared to HMOs or other private accommodation came from first-year-students, which corroborates the study's interview findings that PBSA is in demand from a previously unserved group of first year students:

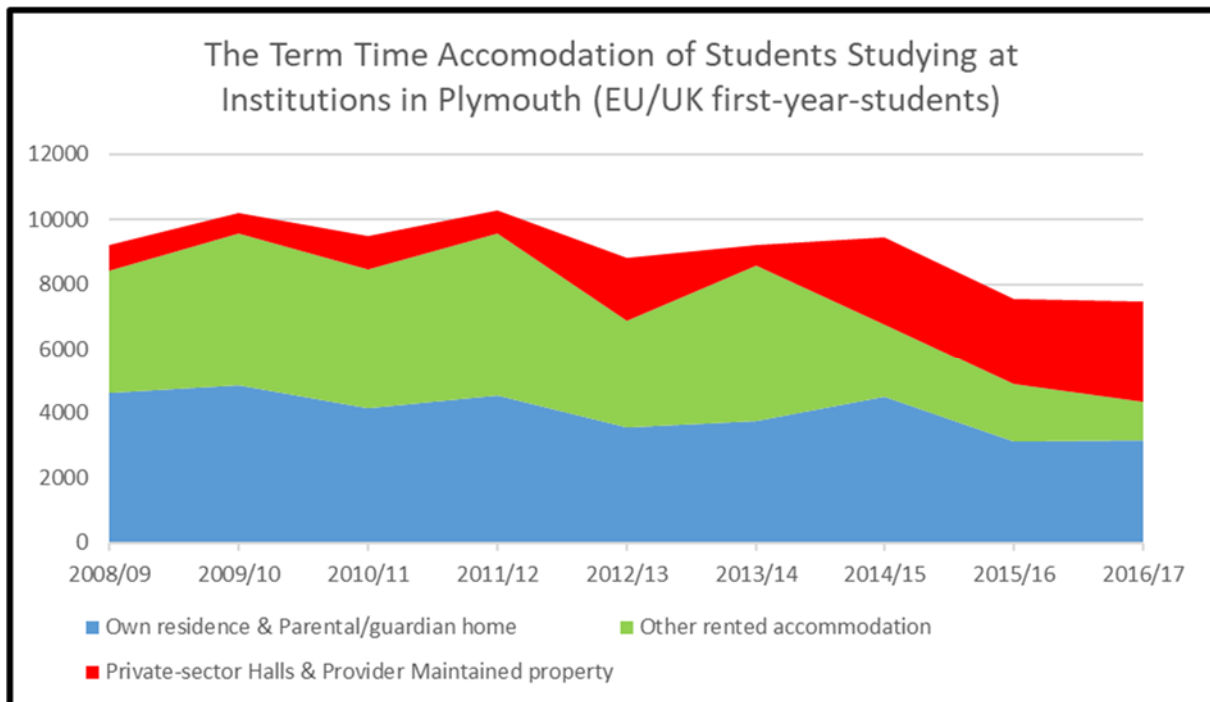


Figure 8- 1st year Full-time Higher Education students in Plymouth (UoP, Marjon & PCA)- Term time accommodation choice (HESA, 2018)

Therefore, demand for the additional PBSA being created is mainly driven by previously under-served first-year-students and some international students. There is little evidence to suggest any other demand for PBSA beyond pre-existing levels.

Demand from first-year-students has not come from growth in university applications, as this is currently low, it is from demand from Plymouth's first year students who previously had to take HMOs as there was no choice, and this was corroborated in the interviews:

"In 2010-11 the University didn't have enough private properties We had to go out and source other [private flats/HMOs] properties because only 60% of first years would get into halls of residence and 40% we would help them find private accommodation with our registered landlords" (University).

"Pre the increase in tuition fees, maybe ten years ago, the university held a meeting for all us private landlords and were encouraging us to buy in Lipson and St Judes [Mount Gould] and create student accommodation as they were short" (Surveyor and landlord).



As discussed in this report, Plymouth was only able to house 5% in PBSA (halls and private) in 2011 (Savills, 2013), and therefore it is reasonable that the market in Plymouth was under developed in terms of PBSA, but with more PBSA now on the market and a drop in student numbers all first years can be housed in PBSA. UK/EU (non-overseas) first year students in Plymouth now occupy 3,135 PBSA beds, roughly 73% compared to 1,155 HMOs/flats beds. This level of increase in PBSA has never been seen before in Plymouth, and first year students appreciate PBSA:

“First years don’t want to look at private [HMOs/flats] unless they are mature or have been there done that. They want halls of residence [PBSA]” (University)

“A HMO is much preferable for a second, third or fourth-year student than PBSA” (Landlord-group)

For students beyond year one, the choice of accommodation is more complex than simply price versus quality: “for those living in more typical accommodation, identity changes appeared to coincide with a change in residence, usually from halls to rented housing. This gave them greater opportunities for social interactions with other students outside of the intensity of halls” (Holton, 2015, p. 205) and Kenyon and Heath (2001) suggesting getting into the private housing market was part of students maturing and forming their identity. The interviews suggested a very similar view to the literature on the area, students beyond first year (apart from internationals) preferring HMOs/flats to PBSA:

“Only first years go into halls 2nd and 3rd years don’t want to be in these purpose-built blocks, because of price and space” (University)

“[PBSA] first year’s want it” (Estate Agent)

“[Second year onwards] students like to live within the community in HMOs rather institutionalised accommodation.” (Councillor)

“Cost is the biggest driver [for second years] and also they don’t want to live in a hotel room another year” (Surveyor and landlord)

“[Negatives of PBSA] It’s hugely expensive, warden’s discipline you, your room is 8ft by 3ft.” (Estate Agent).

Also, it was discussed during the interviews and it ties in with students creating their social identity and have a lot of items, so the smaller accommodation within PBSA may not be appropriate to the modern-day student, gaining their identity and material things as they progress through life:



“they come with lots and lots of stuff, students’ equal stuff these days” (Landlord-group)

The data suggests that PBSA is mainly in demand from first-year-students, and it is unclear how they will increase demand for students beyond year one, but when the council challenge such developments:

“they come back and they say the second and third years want cluster flats.” (PCC)

This is not what the data is showing, as students beyond first year do not demand PBSA in great numbers. Therefore, it is unclear what would motivate developers to create more cluster flats aimed, supposedly aimed at second years, but this could tie back in with the low demand for studio flats with almost 47% vacancy (Hart, 2018) or the fact yields on cluster flats are much higher than the yields on individual units. However, the yield will be even lower if occupancy levels fall.

In the HMO market, students don’t just prefer private HMOs/flats, but according to the interviews are willing to pay more for HMOs now compared to times before the university fee increase in 2012. Initially it was thought that this could be linked to having paid so much more for PBSA (PBSA £140/week, HMO £90/week) that they were just used to spending more. However, the interviewees referred to the student fee increase to £9,000 changed them as a group in terms of the amount they will pay for what they want and what they now expect:

“Very, very direct correlation, the minute they started to be charged £9,000 a year by the institution, they became customers ... their requirement for quality increased rapidly.”
(Surveyor and landlord)

“since the fee hike, we have found students are willing to pay more for [private flats/HMOs] accommodation” (Estate Agent)

“I think they are less driven by cost, unless it is a significant difference” (Surveyor and landlord)

When discussed, students can get HMOs for around £80/week, but come into the estate agent and mainly say their affordability is around £105. They are looking for something quality and are willing to pay for this. It is unclear whether they are gaining additional funds from family members to support higher rental or whether the difference in cost from £80 to £105 is going to amount to much more additional student debt compared to already high levels.

It is assumed that HMOs will return to alternative uses, but little is known about which HMOs change. The interviewees were quite clear as to where de-studentification first occurs, as students choose HMOs in the following preference, that ties very much into the student preference literature (University of Nottingham, 2008):

“location first; they want to live in the city as that’s where stuff is, facilities are probably second and gimmicks third, I would put gimmicks above price. Gimmicks are a something like a projector instead of a TV, something like that” (Estate Agent)

“location has shrunk, we say 2 miles, but most students look for something that 1-mile radius to the campus. But you got your areas at North Hill and North Road East and they have vacancies in their private houses.” (University)

4.4.1. De-studentification

The de-studentification process (Kinton et al., 2016) has clearly mapped what is occurring in previously studentified areas as already mentioned in section 2.3 and reshown below (Figure 9), which was based on observations of de-studentification of the market town of Loughborough. The interviews suggest that Plymouth may be experiencing the process of de-studentification, but there are some observations that particular HMO, landlord and housing need specific factors dictate how the process is experienced.

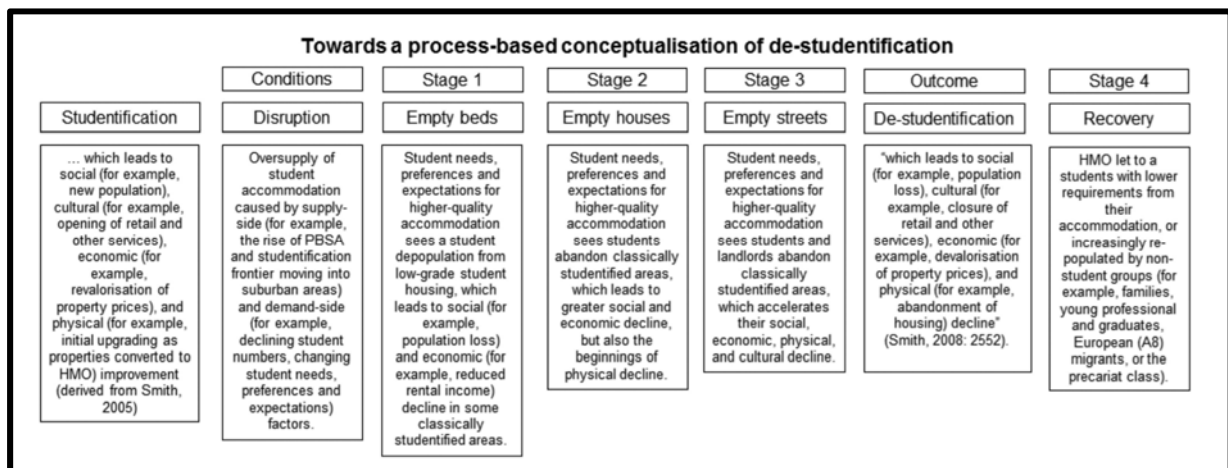


Figure 9 - Towards a process-based conceptualisation of de-studentification (Kinton et al., 2016)

In terms of HMOs, little is known as to the impact when student numbers drop rapidly. The data clearly shows that there is a rising number of mainly first-year-students who are no longer gaining rooms in HMOs (typically large hall-like HMOs), and are taking beds in PBSA. The data also makes it clear that students beyond first year demand HMOs, but interviewees suggested, not large HMOs (more than 6



unrelated persons). Therefore, the additional PBSA being added to the market could be displacing large HMOs and not the small HMOs (3-6 unrelated persons) covered by Article 4 direction.

“Second year students are acutely aware that if you live in a 12-bedroom house next to a bar there is only going to be so much studying going on ...You move out a bit, you roll your sleeves up a bit, and you find a smaller house where you can get on quieter It’s the big houses that students are choosing not to take.” (Estate Agent)

The interviewees insisted overall that small HMOs are still in demand, but they needed to be in the prime student area near North Hill, it is the large HMO properties that have suffered. Smaller and larger HMOs seem to be experiencing a difference in their de-studentification. Areas with large HMO stock with larger houses seem to be experiencing the process of de-studentification (Figure 9 Kinton et al., 2016) and these larger houses may struggle to quickly step into another rental market without significant investment and possible conversion to smaller dwellings. The perception was in the interviews is that small HMOs are quickly stepping over the other stages of the de-studentification process (Figure 9 Kinton et al., 2016). This was due to the characteristics of the homes particular size and location.

“Investors find other things to do with student houses, for example: contractors. Our empty stock goes to contractors.... Also, contractor lets are much, much easier than student accommodation and they pay the same” (Estate Agent)

“the contractors are probably here because they're building the purpose-built student accommodation” (PCC)

“The drop-off in student numbers was compensated by the influx of foreign workers.... Or young single workers, I’ve had no vacancies” (Landlord group).

Those who are not able to switch their student HMO (possible due to HMO size) or do not want to switch to other sharer group are seeing lower occupancy levels, certainly in areas less preferred due to distance (Curtis, 2015) from the main student area.:

“The HMO glut started in 2013-14. Even in areas like Mutley we have vacancies, it not general to one area” (University)



“The more peripheral accommodation has got hammered, St Judes [Mount Gould], Lipson and the wrong side of Mutley Plain ... Private prime location student accommodation will let,”
(Surveyor and landlord)

Interviewees who were familiar with large HMOs and the struggles in the current climate said that landlords were exploring converting to smaller units, but the perception was to convert an old building, which is a lot of Plymouth’s housing stock it is costlier than a new build.

It is maybe obvious that Plymouth with now less students and more choice in terms of accommodation will now see some empty rooms or houses as described by Kinton et al., (2016), but she also went on to describe that when de-studentification occurs (stage 4) there are a range of impacts on local businesses, and Mutley may now be considered a more peripheral area:

“Mutley was always popular as it is close to the campus, but even still there are private houses with vacancies. Not necessarily whole houses, part filled houses. Mutley was the place to be, but the area has started to deteriorate.” (University)

“Especially if you look at Mutley Plain, half the shops are empty. Because Belgrave road, Lisson Grove are not currently full of students.” (Estate Agent).

Mutley Plain may be a casualty of consumer buying behaviour, but it is perceived that the drop in student numbers may have contributed to its decline.

With what appears to be signs of de-studentification, and certainly if landlords can’t turn to other sharer markets, what is the perception of what is happening to student HMOs at present?

“I think ideally with the increase in PBSA in the city it would be good for students to relieve the pressure on the housing market for those that aren't students” (PCC)

“those houses that were large enough for families three four five bedrooms can now be rented out to families or sold to families and it's bringing more children and other people into these neighbourhoods rather than single independent living.” (PCC)

This was somewhat contradicted when discussed with interviewees who are involved in the housing market, it is noted that they do not represent the whole market and can only give their sentiments:

“Less than 10% of unlet student stock goes back to the residential. No one is aware of houses going from the HMO market to the private residential sector. It just isn't happening” (Estate Agent).



“there must be an ulterior motive why they're still giving planning permission for it to come in, it can't be, because of wanting to free up HMOs in the private sector because they know that doesn't work” (Landlord-group)

“Landlords who can't let are not letting to families, they are getting out.” (Surveyor and landlord)

Therefore the process of de-studentification (Kinton et al., 2016) may not be a straightforward process from student use to other uses in areas with Article 4. Changing a previously studentified area into a more mixed residential is fraught with issues. Within an Article 4 area, landlords have perverse incentives to retain the planning permission due to its long-term value, during periods when demand from students is low. Therefore, landlords keep the minimum level of students in their home to avoid council tax and keep their C4 planning, which could be seen as an under-utilisation of housing space. This perceived landlord behaviour may mean certain HMOs do not move beyond stage 1 empty beds (Kinton et al., 2016). It was also suggested that Estate Agents support such behaviour by placing smaller groups in HMOs thus 'holding it' as a student HMO for future years, but this can't be corroborated with data.

In addition, as we have seen from the interviews, residential tenants do not want to move into areas being de-studentified because of the stigma attached to those areas as student ghettos. Landlords do not want to lose C4 planning so will try to attempt to attract other sharers. This may mean that in Plymouth's studentified areas may retain an abundance of HMOs. Landlords may target other sharers such as migrant workers, young professionals and contractors. However, although this group may be available now, with Brexit around the corner and many of the PBSA developments almost complete, whether this is sustainable remains an open question.

4.4.2. De-studentification and location

The discussions from the interviews suggest that properties on the periphery are those most impacted by a decline in student numbers and this was verified using council tax data from 2014 to 2018, focusing on the number of properties in a sector code within the Article 4 area that are council tax exempt Class M - student halls of residence and Class N – 100% full time students. Unfortunately, the data does not classify large and small HMOs, so there is no way to test whether size of property has any influence in certain sector codes.

4.4.3. Student density of M & N Sector Codes 2014 & 2018

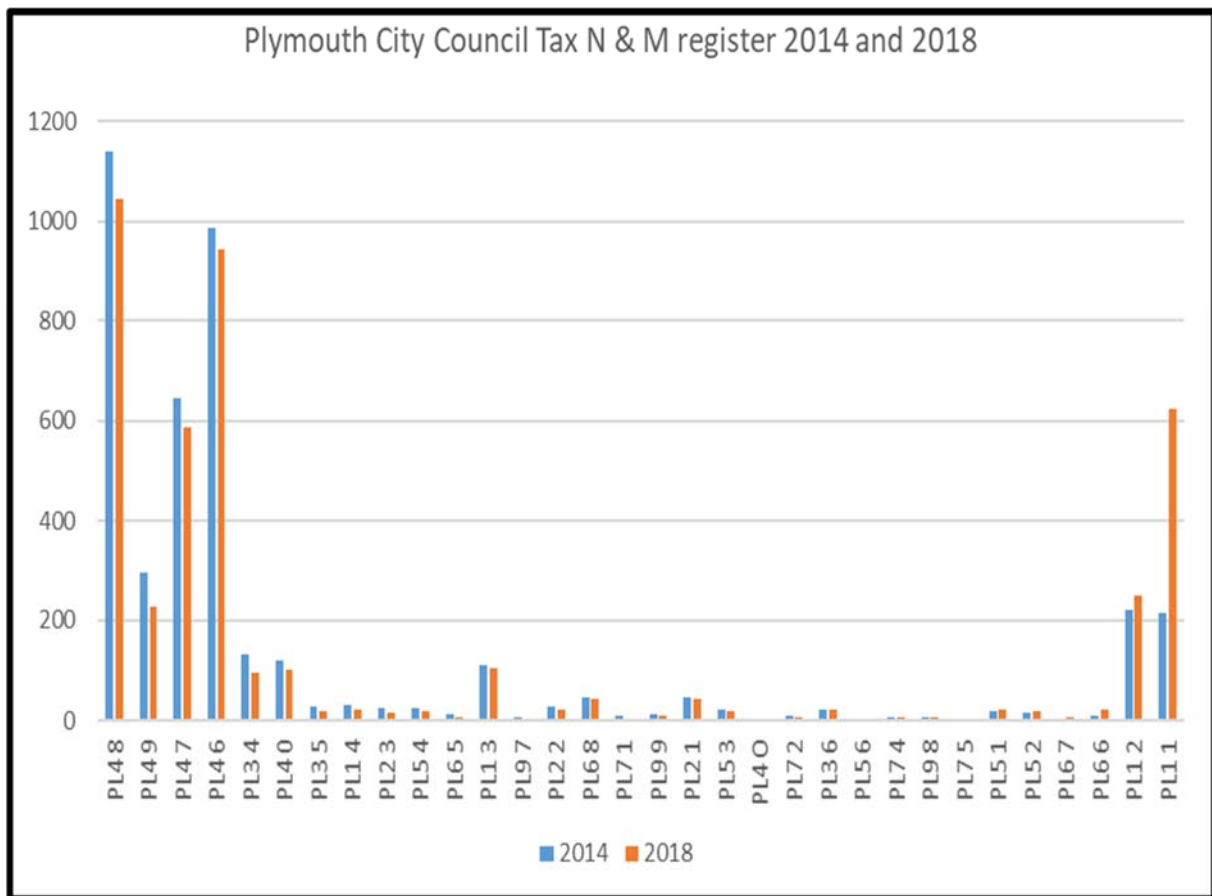


Figure 10 – Sector codes of Council tax properties with category N & M exemption 2014 and 2018 (Data from Plymouth City Council)

Figure 10 demonstrates that students are moving from some sector codes to other sector codes. In the overall area, it was noted that PL1 1, PL1 2 increased their student numbers, but all other areas fell. This is a direct correlation to the fact that many large PBSA buildings have been created in these sector codes. Focusing on the sector codes where movements have been greater than 10 students from 2014-18, the changes become more apparent over a period of time

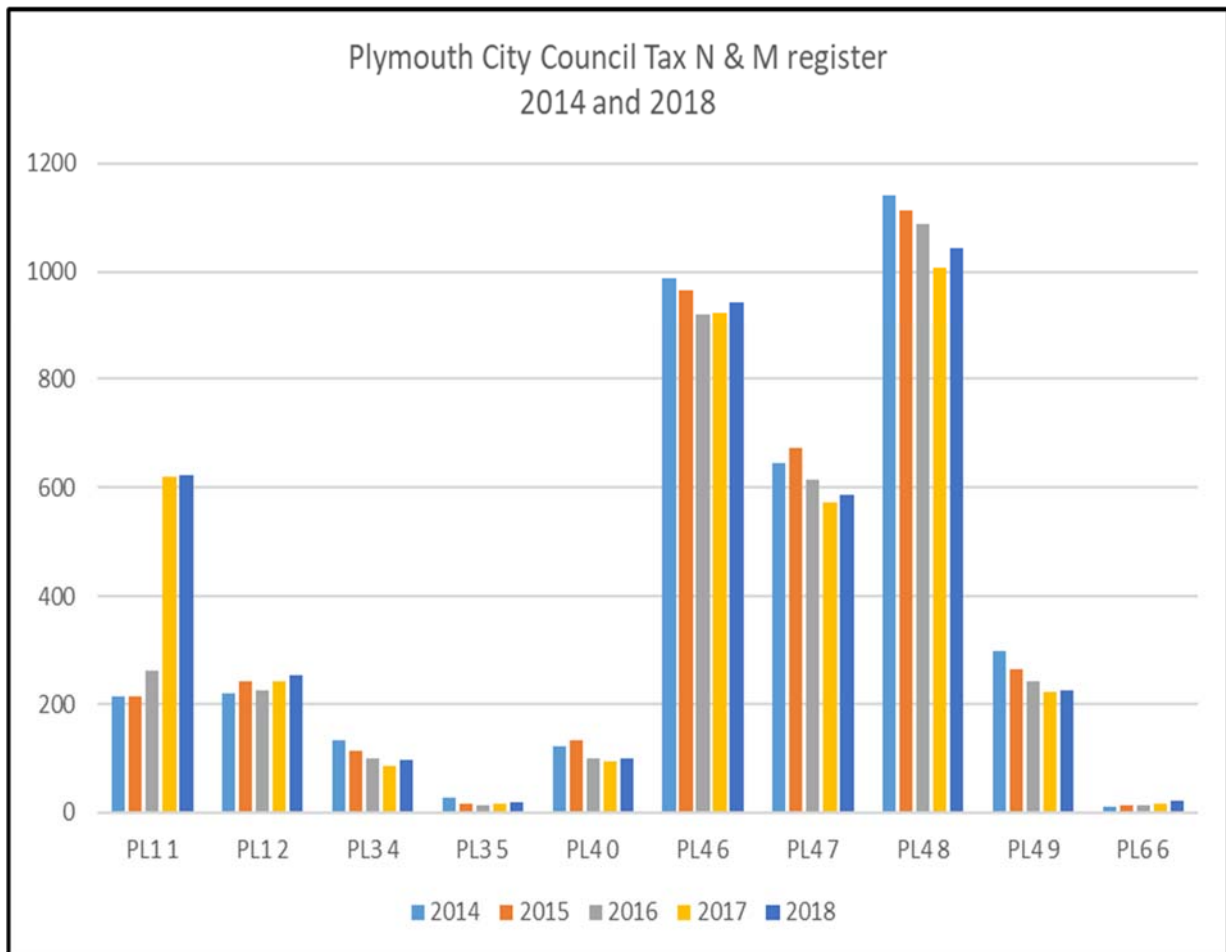


Figure 11– Sector codes Plymouth City Council Tax N & M register 2014 & 2018 (Data from Plymouth City Council)

It is noticeable that, as highlighted in section 4.2, HESA, (2018) data suggested that mainly first-year-students were taking the PBSA rooms, this could be seen a migration of students towards the city centre sector codes, such as PL1 1, which has tripled the number of students from 2014-18. 2017 saw a low point in exempt student properties, but this has bounced back in 2018 due mainly to PBSA developments in PL1 and PL4 area codes, but may also suggest that landlords/estate agents may be playing the game of under-utilising properties by placing a few students in a property to avoid paying council tax. One further possibility that could be explored is use of flats, as another option is that HMOs could be let as separate units, and this would increase council tax exemption figures. It may also be the case that student numbers increased slightly in 2017/18, but this can only be corroborated when HESA release these figures in 2019.



Further analysis is required here, but individual property information would need to be added to the data, such as flat or house and splitting PBSA from private in the data. This does need investigation, especially when there are another 853 PBSA beds being released in 2019:

Sector Code	Beds				Total
	Existing	Recently complete	Under-construction	Planning approved	
PL1 1	540	668	462	1311	2981
PL1 2	617	0	348	0	965
PL1 4	0	56	0	0	56
PL1 5	83	0	0	0	83
PL4 6	605	164	0	39	808
PL4 7	427	0	43	0	470
PL4 8	1576	0	0	72	1648
PL4 9	483	45	0	8	536
PL6 8	579	0	0	0	579
Unknown	510	0	0	0	510
Total	5420	933	853	1430	8636

Table 5 – Sector codes for PBSA beds built (existing), recently built and those under-construction 2018 (Appendix 2).

It seems that that sector code PL1 1 and PL1 2 are growing in terms of student numbers and peripheral areas are in decline, as shown below geographically:

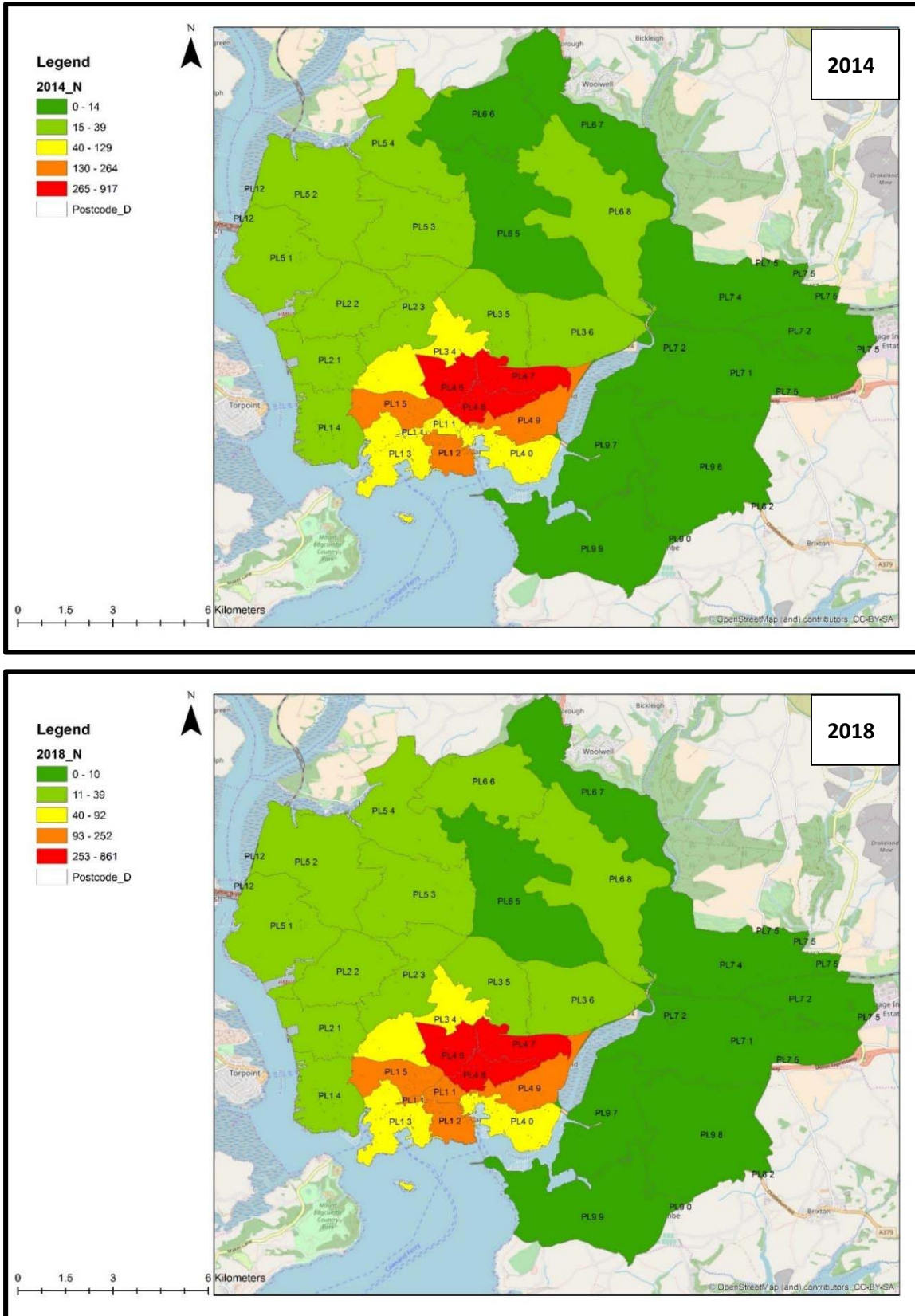


Figure 12 - 2014 and 2018 Number of M & N exemptions per sector in Plymouth



This de-studentification is a migration south and a pull towards the city centre, but the private market as shown above and highlighted in red still hold many student properties. Whether this will continue to be the case with another 1,430 beds with planning permission (mainly in PL1 1) remains to be seen, but one thing is clear: there is a lot more competition due to come on stream next year (853 beds).

4.5. PBSA and the city centre

Two areas that need to be considered with the added PBSA, firstly that PBSA is more expensive and therefore is taking money away from Plymouth's economy (on the assumption that funds would be spent elsewhere), and secondly all PBSA is concentrated in the city centre and therefore may have other negative impacts:

“If you're getting a more limited supply of houses that are being used for students then the PBSA could suddenly become in more demand and they could increase their prices and it would force students to have to possibly pay an increase rate.” (PCC)

This area needs further investigation, added competition is certainly being noted with price drops from PBSA providers. In the interviews, it was discussed that a room at one of the peripheral PBSA's Alexandra works was £120/week and is now offering rooms at £65/week. This is not the only PBSA provider offering rooms under £100/week, and as 853 rooms are due to be released for 2018/19, things are only going to get more competitive. Some PBSA has been changed to hotel type accommodation aimed at AirBnB style rooms and others have applied for a variation in their planning to be a hotel during the summer months.

4.5.1. PBSA Town and Gown Conflict

It is hoped that a more institutional approach to housing students can also deal with the student conflicts that have been highlighted as conflicts around noise, anti-social behaviour, rubbish creation and parking issues (Bowden et al., 2011; Chan et al., 2011; Curtis, 2015; Eshelby, 2015; Holton, 2015; Ike et al., 2017; Kenna, 2011; Rugg et al., 2000; Sage et al., 2012; Smith, 2004). It is yet unknown whether PBSA will be successful in dealing with 'town and gown' conflicts, but by attracting the most social group (Hubbard, 2009) into the centre and away from residents along with other anti-social legislation in place, issues may reduce. Having PBSA in areas where there is less residential homes can be seen as beneficial for local residents (Sage et al., 2013) and also bring added footfall to struggling town centres in the UK, but the interviewees remained sceptical about PBSA:

“PBSA is antisocial, it is not good for their social and mental health, you can have a room in PBSA and you can go in the front door and up the lift to your property and see no one. You



don't have to share a bathroom or share anything. You go in a hotel and I could be in the room next and I don't know you are there." (Experienced HMO Investor and Chartered surveyor)

"you're actually just going to condense the problem in another area aren't you. Whether you have high-rise student accommodation or not. You're just shuffling the problem around the city" (City Councillors)

"You are ghettoising the student population. You are not having a more mixed community by moving them into the city." (City Councillors)

"you dominate a particular area of the city you get a huge cross-section of the student population and when you're not really integrating with the community when you are actually living in such huge numbers within that area for a transient period of time ie three years" (City Councillors)

It is reasonable that there is concern around PBSA within the city centre as this is a new phenomenon, but it is clear that the city needs to create additional housing with so many on the waiting list for housing. However, so much PBSA within the city centre is concerning businesses as well, Doug Fletcher, chairman of Plymouth City Centre Company, who represents 600 traders, opposed the recent Money Centre development, stating, "potential ghettoisation" and long term financial sustainability – particularly as by the nature of the accommodation provided is expensive to rent, added to which student numbers are predicted to flat line in the future" (Telford, 2018b).

One thing is certain, PBSA is going to play a larger part in the offer of accommodation to students coming to Plymouth.



5. Conclusion

Changes in HE policy are having an impact on numbers of student (Moran and Powell, 2018) attending UK universities. Removal of the number caps is resulting in greater competition and some university groups are coping better than others. The number cap removal has benefited the Russell Group universities who are now taking more students than before (Fazackerley, 2018). Other universities are focussing on league table ranking and changing their recruitment strategies. Recently some universities have started to be admitting fewer students but with better entry qualifications which helps to bolster their ranking. Consequently, student numbers in some university towns, such as Plymouth, are falling, which is having an impact on student housing.

In Plymouth, falling student numbers have resulted in a significant change in the demand for student housing. The interviewees who provided evidence for this study noted this change, which is supported by HESA and council tax data. The university groups currently taking more students than previously may reach a critical mass and the university sector may stabilise. For Plymouth, this may mean that the current student numbers are the new norm and landlords with under-utilised student HMO assets will need to consider whether retaining the asset as such makes commercial sense. With added PBSA supply in Plymouth and lower than usual numbers of 18-year-olds nationally, until 2024 (UCAS, 2015), many landlords may decide to exit the student HMO market in Plymouth. However, the study results recognised that the number of 18 years olds will recover to 2015 levels by 2024 and will grow beyond this point (Ernst & Young, 2016). The landlords who ride out the downturn may find themselves with higher demand and less HMO competition in future. Furthermore, with Article 4 in effect in Plymouth, additional HMO competition will be restricted resulting in HMOs in student areas benefitting from increasing rental incomes and values.

The perceived impact of Article 4 is that student HMO landlords face an added complication when formulating asset investment strategies. Landlords recognise the value of HMO planning consent in an area where Article 4 limits supply, and that returning HMO properties to family residential use, would tend to reduce the asset's value, rental yields and increase the difficulty of recreating the HMO when demand revives. Consequently, landlords prefer to retain their student HMOs even if they are under-utilised and producing sub-optimal returns/yields. There is thus a hold up in the natural process of de-studentification (Kinton et al., 2016) in areas where Article 4 applies. The intention of Article 4 was to limit supply, but may have the perverse effect of encouraging assets to remain as student HMOs. However, this is inferred from interviewees' perceptions and better understanding is needed, which might be achieved by working with Plymouth City Council Tax department to see the effect of adding building characteristics to their dataset.



This study concludes that PBSA is effective in helping to provide first year Plymouth students with their desired university experience (Horton and Kraftl, 2013) and away from HMOs in residential areas. It is anticipated that this move of the most sociable group of students south into the university area and city centre retail zone will reduce conflicts resulting from noise and rubbish creation in residential areas. Both areas are effectively controlled by private organisations and ultimately this will lower the burden on PCC. However, the study also demonstrates in the geographic mapping (section 4.4.3) that private HMOs/flats play an important role in meeting the student housing need. Furthermore, the study clearly demonstrates that the demand for PBSA comes mainly from first year students and international students. Therefore, this report recommends that the number of PBSA rooms in the city should not significantly exceed that required to accommodate this group and efforts should be made to align this supply with demand.

This study also concludes that certain sector codes; PL1 1, PL1 2, PL4 6, PL4 7, and PL4 8 contain the majority of the PBSA beds and PBSA beds in development. This will result in greater numbers of students living in densely populated high-rise blocks in these locations and the studentification of these areas should be carefully analysed over time to monitor conflict, student integration into the community, and student wellbeing.

It is worth considering that the possible over-supply of student accommodation, and the recently noticed price reductions by PBSA providers, may result in a price war between PBSA and HMOs. How HMOs will fare against institutionally backed PBSA developers is unknown, but if HMOs exit the market unable to compete they are unlikely to regain HMO status due to Article 4 Direction. Therefore, looking forward to 2024 when numbers are set to rebound to 2015 levels and grow, the dominant player may be in a position to set prices to the detriment of student disposable income available to be spent in Plymouth.

The process of de-studentification is occurring in Plymouth with empty beds and possibly empty houses being mentioned in the interviews. The perception is that student HMO dominant areas, are not seeing mass vacancies due to a rise in demand from foreign workers and/or contractors. The perception is that in Plymouth, due to high housing demand, HMOs are quickly recovering and attracting different types of sharer. One further observation was that perception of HMOs that are unable to shift into other markets quickly are facing issues due to being in areas with a student stigma attached, and resulting in an inability to attract residential tenants, and sit empty or partially empty amongst other under-utilised student HMOs. However, this has still not resulted in empty streets or HMOs being left to ruin.



This study concludes that de-studentification is linked to location. Properties further away from the university student area are more likely to face de-studentification, but these are generally in areas that are less studentified anyway, so these HMOs will bypass the whole process of de-studentification and revert to non-HMO residential use once the landlord so decides. Further detailed analysis of postcode specific locations and property characteristics would give a richer picture of the de-studentification process.

This report concludes that large HMOs (more than six unrelated persons) seem to be out-of-favour in Plymouth with its wealth of PBSA alternatives. Although it is clear that changes in student preferences will result in de-studentification (Kinton et al., 2016) further analysis is required to understand which HMOs are most impacted. It appears from this study that large HMOs are impacted more than small HMOs by increased PBSA than small HMOs (between three and six unrelated persons) and further investigation is needed in this area.



References

- Allinson, J. (2006), "Over-educated, over-exuberant and over here? The impact of students on cities", *Planning Practice and Research*, Vol. 21 No. 1, pp. 79–94.
- Ashreena, T. (2017), "Developers have scope to plug student accommodation gap", *Property Week*, available at: <https://www.propertyweek.com/data/developers-have-scope-to-plug-student-accommodation-gap/5089136.article> (accessed 28 August 2018).
- Bailey, A.J. (2009), "Population geography: lifecourse matters", *Progress in Human Geography*, Vol. 33 No. 3, pp. 407–418.
- Ben-Shlomo, Y., Brookes, S. and Hickman, M. (2013), *Lecture Notes: Epidemiology, Evidence-Based Medicine and Public Health*, John Wiley & Sons.
- BIS. (2016), "Success as a Knowledge Economy: Teaching Excellence, Social Mobility & Student Choice", available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/523396/bis-16-265-success-as-a-knowledge-economy.pdf.
- Bowden, A., Rivard, N. and Rose, J. (2011), "Student Accommodation in Wembley", *Retrieved From*.
- Boxall, M. (2016), "Higher education white paper: the big changes", *The Guardian*, available at: <https://www.theguardian.com/higher-education-network/2016/may/16/higher-education-white-paper-the-big-changes>.
- British Political Speech. (1996), "Leader's speech, Blackpool 1996 - Tony Blair", available at: <http://www.britishpoliticalspeech.org/speech-archive.htm?speech=202> (accessed 5 September 2018).
- British Property Federation. (2018), *PBSA-Manifesto-for-Web.Pdf*, available at: <https://www.bpf.org.uk/sites/default/files/resources/PBSA-Manifesto-for-web.pdf> (accessed 7 September 2018).
- Bryman, A. (2003), *Quantity and Quality in Social Research*, Routledge.
- Bryman, A. and Bell, E. (2015), *Business Research Methods*, Oxford University Press, USA.
- Bulmer, M. (1986), *The Chicago School of Sociology: Institutionalization, Diversity, and the Rise of Sociological Research*, University of Chicago Press.
- Burrell, G. and Morgan, G. (1979), "Social paradigms and organizational analysis", *Elements of the Sociology of Corporate Life*.
- Chan, J., Dubois, S., Fahey, R. and Josephs, S. (2011), "Evaluating Student Housing in London", *BSc Dissertation*, available at: <https://pdfs.semanticscholar.org/91c8/f8a76882731d928af81734d0bd96b78a5b4f.pdf>.
- Chatterton, P. (1999), "University students and city centres—the formation of exclusive geographies: The case of Bristol, UK", *Geoforum*, Vol. 30 No. 2, pp. 117–133.
- Chatterton, P. (2010), *Environment and Planning A*, Vol. 42 No. 1, p. 509.
- Christie, H., Munro, M. and Rettig, H. (2002), "Accommodating students", *Journal of Youth Studies*, Vol. 5 No. 2, pp. 209–235.
- Collis, J. and Hussey, R. (2014), "Business Research-a practical guide for undergraduate and postgraduate students: Palgrave Macmillan Higher Education".



- Coughlan, S. (2017), *10 Charts That Show the Effect of Tuition Fees*, BBC, available at: <http://www.bbc.co.uk/news/education-40511184>.
- Curry, R. (2017), "Student housing may be a property bubble in waiting", *The Telegraph*, 18 September, available at: <https://www.telegraph.co.uk/business/2017/09/18/student-housing-may-property-bubble-waiting/> (accessed 17 September 2018).
- Curtis, M.L. (2015), "Student identities in new spaces of higher education".
- Cushman & Wakefield. (2018), *UK Student Accommodation Report - 2017/18*, available at: <http://www.cushmanwakefield.co.uk/en-gb/research-and-insight/2016/uk-student-accommodation-report> (accessed 18 September 2018).
- Ernst & Young. (2016), "Uk purpose built student accommodation - testing times ahead", available at: <https://www.ey.com/Publication/vwLUAssets/ey-uk-purpose-built-student-accommodation/%24FILE/ey-uk-purpose-built-student-accommodation.pdf> (accessed 29 August 2018).
- Eshelby, E.-M. (2015), "Gown and Town: The unfolding presence of studentification in Clarendon Park, Leicester".
- Fazackerley, A. (2018), "Fears of university closures after removal of safety net", *The Guardian*, 30 January, available at: <http://www.theguardian.com/education/2018/jan/30/fears-university-closures-office-for-students> (accessed 10 August 2018).
- Fincher, R. and Shaw, K. (2009), "The unintended segregation of transnational students in central Melbourne", *Environment and Planning A*, Vol. 41 No. 8, pp. 1884–1902.
- Gibb, K. and Nygaard, C. (2005), "The impact of buy to let residential investment on local housing markets: Evidence from Glasgow, Scotland", *International Journal of Housing Policy*, Vol. 5 No. 3, pp. 301–326.
- Glanville, P. (2017), "I make no apologies for my council's controversial new housing strategy after we were given zero funds from the Government", *The Independent*, available at: <http://www.independent.co.uk/voices/hackney-council-housing-government-austerity-cuts-controversial-strategy-gentrification-a7886331.html>.
- Hammersley, M. (2016), *Reading Ethnographic Research*, Routledge.
- Harding, E. and McLennan, C. (2017), *Top Universities in Clearing Free-for-All as They Desperately Try to Fill Courses: Institutions Lower Entry Requirements after Dip in Number of Applications.*, available at: <http://www.dailymail.co.uk/news/article-4790694/Top-universities-desperate-attempt-courses.html>.
- Hart, A. (2018), "Time to put the Purpose-Built Student Accommodation myth to bed", *Allsop*, 31 May, available at: <https://www.allsop.co.uk/media/time-put-purpose-built-student-accommodation-myth-bed/> (accessed 10 September 2018).
- Hassard, J. and Kelemen, M. (2002), "Production and consumption in organizational knowledge: The case of the paradigms debate", *Organization*, Vol. 9 No. 2, pp. 331–355.
- Henry, G.T. (1990), *Practical Sampling*, Vol. 21, Sage.
- HESA. (2018), "Data and analysis", available at: <https://www.hesa.ac.uk/data-and-analysis> (accessed 29 August 2018).
- Holdsworth, C. (2009), "Going away to uni? Mobility, modernity and independence of English higher education students", *Environment and Planning A*, Vol. 41, pp. 1849–64.



- Holton, M. (2015), "Adapting relationships with place: investigating the evolving place attachment and 'sense of place' of UK higher education students during a period of intense transition", *Geoforum*, Vol. 59, pp. 21–29.
- Horton, J. and Kraftl, P. (2013), *Cultural Geographies: An Introduction*, Routledge.
- Hubbard, P. (2008), "Regulating the social impacts of studentification: a Loughborough case study", *Environment and Planning A*, Vol. 40 No. 2, pp. 323–341.
- Hubbard, P. (2009), "Geographies of studentification and purpose-built student accommodation: leading separate lives?", *Environment and Planning A*, Vol. 41 No. 8, pp. 1903–1923.
- Hughes, D. and Davis, M. (2002), "Student housing: a cautionary tale of one city", *The Journal of Social Welfare & Family Law*, Vol. 24 No. 2, pp. 135–155.
- Ike, N., Baldwin, C. and Lathouras, A. (2017), "Optimising Tertiary Student Accommodation within University Neighbourhoods", *Articulo-Journal of Urban Research*.
- JLL. (2017), "Student Housing Quarterly Bulletin 2017 Q1 Update", available at: <http://www.jll.co.uk/united-kingdom/en-gb/Documents/property-sectors/alternative-investments/JLL-Student-Housing-Quarterly-Bulletin-2017-Q1-Update-FINAL.pdf> (accessed 28 August 2018).
- Kenna, T. (2011), "Studentification in Ireland? Analysing the impacts of students and student accommodation on Cork City", *Irish Geography*, Vol. 44 No. 2–3, pp. 191–213.
- Kenyon, E. (1997), "Seasonal Sub-Communities: The Impact of Student Households on Residential Communities", *The British Journal of Sociology*, Vol. 48, pp. 286–301.
- Kenyon, E. and Heath, S. (2001), "Choosing this life: narratives of choice amongst house sharers", *Housing Studies*, Vol. 16 No. 5, pp. 619–635.
- Kinton, C., Smith, D.P. and Harrison, J. (2016), "De-studentification: emptying housing and neighbourhoods of student populations", *Environment and Planning A*, Vol. 48 No. 8, pp. 1617–1635.
- Levin, J. (2005), "New Directions for Higher Education: The business culture of the community college: Students as consumers; students as commodities", *New Directions for Higher Education*, Vol. 129, pp. 11–26.
- Maxwell, J. (1992), "Understanding and validity in qualitative research", *Harvard Educational Review*, Vol. 62 No. 3, pp. 279–301.
- Miles, M.B., Huberman, A.M., Huberman, M.A. and Huberman, M. (1994), *Qualitative Data Analysis: An Expanded Sourcebook*, sage.
- Ministry of Housing. (2014), "Housing and economic land availability assessment", *GOV.UK*, 3 June, available at: <https://www.gov.uk/guidance/housing-and-economic-land-availability-assessment> (accessed 21 September 2018).
- Ministry of Housing and Communities & Local Government. (2014), "When is permission required?", *GOV.UK*, 3 June, available at: <https://www.gov.uk/guidance/when-is-permission-required> (accessed 27 September 2018).
- Moore, E. (2018), "Plymouth's new money man says he's found a £2.4m hole in city's finances - Plymouth Live", 24 May, available at: <https://www.plymouthherald.co.uk/news/plymouth-news/plymouths-new-money-man-says-1606439> (accessed 14 September 2018).
- Moran, H. and Powell, J. (2018), "Running a tight ship: can universities plot a course through rough seas?", p. 48.



- Munro, M., Turok, I. and Livingston, M. (2009), "Munro and livingston (2012) student impacts on urban neighbourhoods", *Environment and Planning A*, Vol. 41 No. null, p. 1826.
- National HMO Lobby. (2018), "National HMO Lobby", available at: <http://www.hmobby.org.uk/> (accessed 7 September 2018).
- National Planning Policy Framework. (2018), *National Planning Policy Framework*, available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/733637/National_Planning_Policy_Framework_web_accessible_version.pdf (accessed 7 September 2018).
- Northey, M. (2006), *Student Impact Scrutiny Review.*, Canterbury City Council.
- Office of the Director of Public Health. (2013), "SUMMARY 2011 CENSUS PROFILE DRAKE WARD", available at: https://www.plymouth.gov.uk/sites/default/files/DrakeWardSummary_PROFILE_130716.pdf (accessed 6 September 2018).
- O'Leary, M. (2018), "Cuts of £25M for Plymouth - this is who will suffer most", *Plymouthherald*, 17 August, available at: <https://www.plymouthherald.co.uk/news/plymouth-news/plymouth-council-tax-cuts-budget-1906850> (accessed 7 September 2018).
- Paton, G. (2010), "University admissions: Labour's student drive that backfired", *The Telegraph*, available at: <http://www.telegraph.co.uk/education/educationnews/7191924/University-admissions-Labours-student-drive-that-backfired.html>.
- Plymouth City Council. (2013a), "Development Guidelines Supplementary Planning Document", available at: https://www.plymouth.gov.uk/sites/default/files/DevelopmentGuidelinesSupplementaryPlanningDocumentFirstReview_0.pdf (accessed 28 August 2018).
- Plymouth City Council. (2013b), "Area to be covered by Article 4 Direction", available at: https://www.plymouth.gov.uk/sites/default/files/Article4DirectionMap_0.pdf (accessed 28 August 2018).
- Plymouth City Council. (2014), *What Are Plymouth's Future Housing Needs?*, Plymouth City Council, UK, available at: <https://www.plymouth.gov.uk/sites/default/files/PCCHousingNeedAndSupplyTopicPaper.pdf>.
- Plymouth City Council. (2017), "Plymouth Student Accommodation", available at: <https://www.plymouth.gov.uk/sites/default/files/PlymouthStudentAccommodation.pdf> (accessed 28 August 2018).
- Punch, K.F. (2005), "Introduction to Social Researches—Qualitative and Quantitive Approaches", *Ankara: Siyasal Publishing*.
- Raco, M. and Imrie, R. (2003), *Urban Renaissance? : New Labour, Community and Urban Policy*, Policy Press, Bristol.
- Rhodes, D. and Bevan, M. (2003), *Private Landlords and Buy to Let*, Centre for Housing Policy, University of York.
- RLA. (2012), "Planning Use Laws for HMOs in the Private Rented Sector", available at: <https://www.rla.org.uk/html/PlanningClassesApr10.shtml> (accessed 21 September 2018).
- RLA. (2018), "Article 4 Directions", *RLA Campaigns and News Centre*, available at: <https://news.rla.org.uk/campaigns/local-government/article-4/> (accessed 31 August 2018).



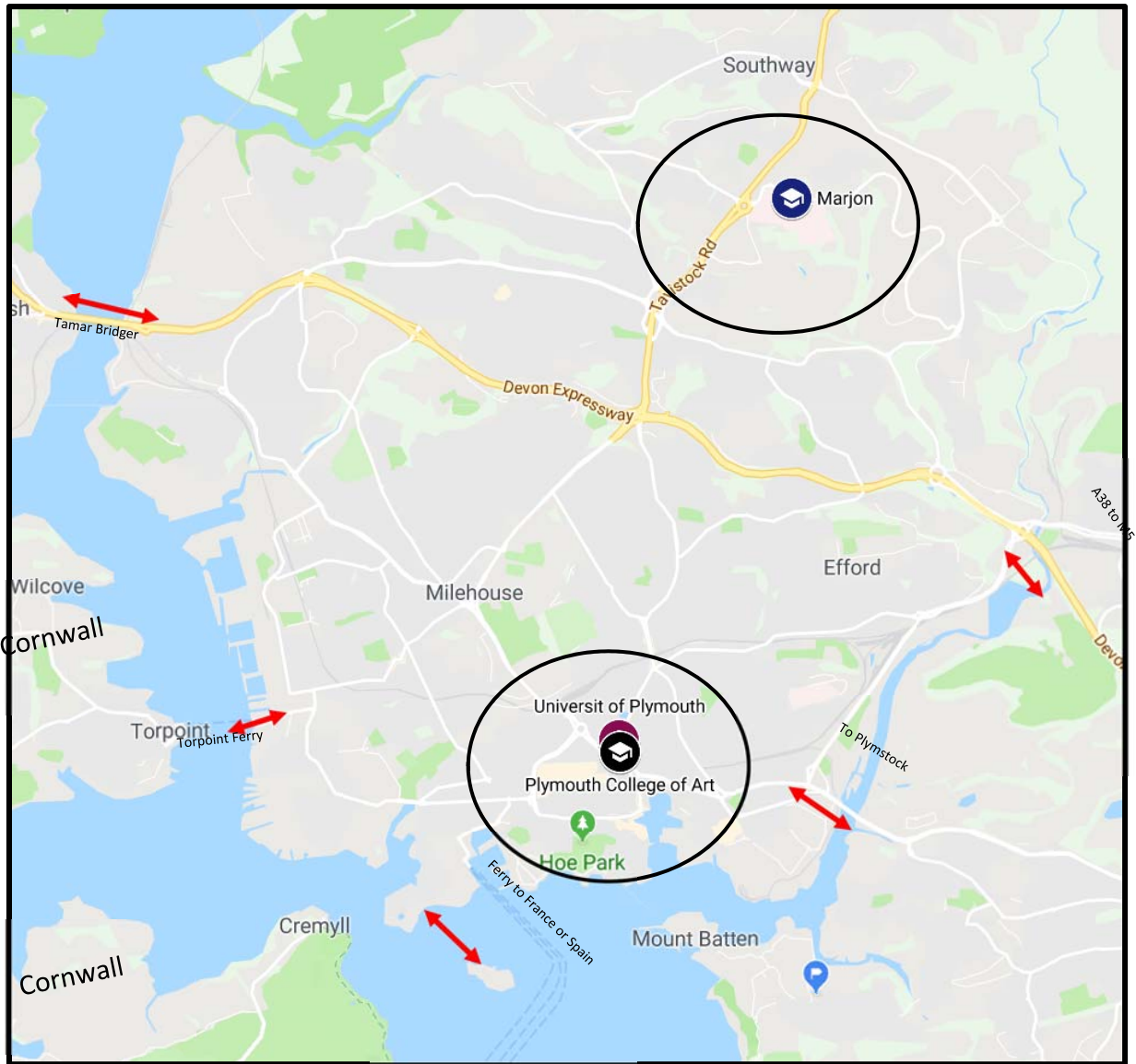
- Rugg, J., Rhodes, D. and Jones, A. (2000), *The Nature and Impact of Student Demand on Housing Markets*, Joseph Rowntree Foundation, York.
- Ruiu, M.L. (2017), "Collaborative management of studentification processes: the case of Newcastle upon Tyne", *Journal of Housing and the Built Environment*, Vol. 32 No. 4, pp. 843–857.
- Sage, J., Smith, D. and Hubbard, P. (2012), "The Diverse Geographies of Studentification: Living Alongside People Not Like Us", *Housing Studies*, Vol. 27 No. 8, pp. 1057–1078.
- Sage, J., Smith, D. and Hubbard, P. (2013), "New-build studentification: A panacea for balanced communities?", *Urban Studies*, Vol. 50 No. 13, pp. 2623–2641.
- Santander and Clever Student Lets. (2016), *Getting Clever over Student Spending*, available at: <https://www.cleverstudentlets.com/getting-clever-over-student-spending/>.
- Savills. (2013), "Spotlight Student Housing 2013", available at: <https://pdf.euro.savills.co.uk/residential---other/spot-studenthousing-lr.pdf> (accessed 28 August 2018).
- Simmonds, N. (2017), "Investment in PBSA to Reach Nearly £5bn in 2017", *Prinvest UK*, 30 May, available at: <http://prinvest.uk/property-news/5574/investment-in-pbsa-to-reach-nearly-5bn-in-2017> (accessed 17 September 2018).
- Smith, D. (2002), "Processes of studentification in Leeds", report presented to the City and Regional Office", *University of Leeds, Leeds*.
- Smith, D. (2008), "The politics of studentification and (un)balanced urban populations - lessons from gentrification and sustainable com.pdf".
- Smith, D.P. (2004), "'Studentification': the gentrification factory?", *Gentrification in a Global Context*, Vol. 73.
- Smith, D.P. and Holt, L. (2007), "Studentification and 'Apprentice' Gentrifiers within Britain's Provincial Towns and Cities: Extending the Meaning of Gentrification", *Environment and Planning A*, Vol. 39 No. 1, pp. 142–161.
- Stevenson, R. and Askham, P. (2011), "Purpose built student accommodation: changing face of student accommodation in Sheffield", *Sheffield Hallam University Built Environment Research Transactions*, Vol. 3 No. 1, pp. 6–16.
- Telford, W. (2018), "Plymouth is in danger of creating a 'student ghetto' - city centre boss - Plymouth Live", 29 January, available at: <https://www.plymouthherald.co.uk/news/plymouth-news/city-centre-chiefs-plymouth-doesnt-1117259> (accessed 28 September 2018).
- Thomsen, J. and Eikemo, T.A. (2010), "Aspects of student housing satisfaction: a quantitative study", *Journal of Housing and the Built Environment*, Vol. 25 No. 3, pp. 273–293.
- Town and Country Planning (General permitted development) (England) Order 2015. (2015), "The Town and Country Planning (General Permitted Development) (England) Order 2015", available at: <http://www.legislation.gov.uk/uksi/2015/596/schedule/2/part/3/crossheading/class-l-small-hmos-to-dwellinghouses-and-vice-versa/made> (accessed 14 September 2018).
- Toynbee, P. and Walker, D. (2001), *Did Things Get Better? An Audit of Labour's Successes and Failures*, Penguin books, London.
- Turnbull, S. (2018), "A Guide to UK League Tables in Higher Education", p. 44.
- Tyler, R. (2008), "Purpose Built Development: National HMO Lobby".



- UCAS. (2015), *End of Cycle Report 2015*, available at: <https://www.ucas.com/sites/default/files/eoc-report-2015-v2.pdf> (accessed 14 September 2018).
- Universities UK. (2006), *Universities-Planning-Guidance.Pdf*, available at: <https://www.universitiesuk.ac.uk/policy-and-analysis/reports/Documents/2008/universities-planning-guidance.pdf> (accessed 7 September 2018).
- University of Nottingham. (2008), *Housing Preferences for Students at Nottingham's Universities*, available at: <https://www.nottingham.ac.uk/survey-unit/Studenthousing.pdf> (accessed 6 September 2018).
- Walshe, J. (2007), *OECD: Worldwide 'obsession' with League Tables*, available at: <http://www.universityworldnews.com/article.php?story=20071108145803689>.
- Watson, D. (2007), "Does higher education need a Hippocratic oath?", *Higher Education Quarterly*, Vol. 61 No. 3, pp. 362–374.
- West Devon Borough Council, South Hams District Council and Plymouth City Council. (2017), "Plymouth South West Devon Joint Local Plan", available at: https://www.plymouth.gov.uk/sites/default/files/PlymouthSouthWestDevonJointLocalPlan_0.pdf (accessed 28 August 2018).
- XE Currency. (2018), "XE: GBP / USD Currency Chart. British Pound to US Dollar Rates", available at: <https://www.xe.com/currencycharts/?from=GBP&to=USD&view=10Y> (accessed 17 September 2018).
- Yin, R. (1984), "case study research. Beverly Hills".

Appendices

1. Appendix 1 – Map of Plymouth area and three higher education institutions

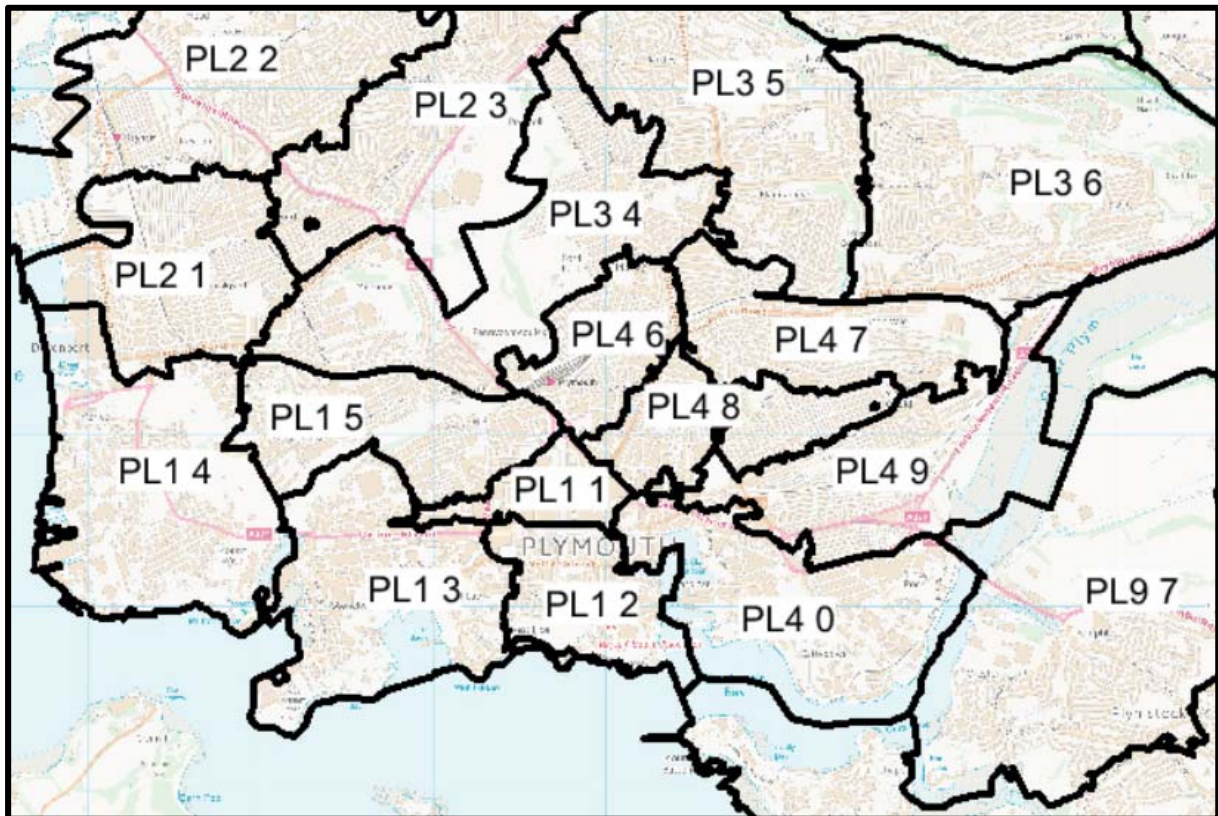




2. Appendix 2 - Student PBSA Plymouth

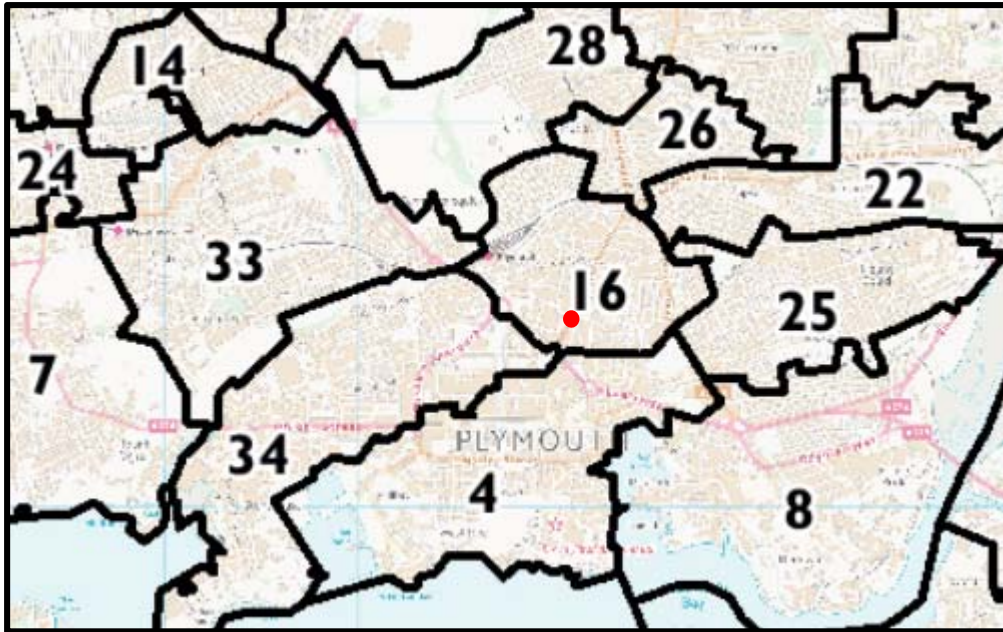
PBSA Name	Construction phase	Postcode	Sector Code	Operator	Beds	Total Beds
iQ Astor House	Existing	PL1 2AQ	PL1 2	IQ	519	
Robbins Hall	Existing	PL4 8BZ	PL4 8	UPP	431	
Radnor Hall	Existing	PL4 8BX	PL4 8	UPP	408	
Francis Drake Hall	Existing	PL4 6AP	PL4 6	UPP	329	
Discovery Heights	Existing	PL1 1UH	PL1 1	Unite	281	
Alexandra Works	Existing	PL4 7DU	PL4 7	Unite	246	
Pilgrim Hall	Existing	PL4 8BT	PL4 8	UPP	237	
St Thomas Court	Existing	PL4 9AP	PL4 9	Unite	237	
Central Point	Existing	PL1 1EW	PL1 1	Unite	235	
Central Park Towers	Existing	PL4 8AA	PL4 8	CentralParkTowers	200	
Gilwell Hall	Existing	PL4 8AP	PL4 8	UPP	200	
Mary Newman Hall	Existing	PL4 6DH	PL4 6	UPP	157	
Frobisher House	Existing	PL4 9AQ	PL4 9		134	
St Teresa House	Existing	PL4 9AZ	PL4 9	Unite	112	
The Old Dairy	Existing	PL4 8BD	PL4 8		100	
St Augustine's House	Existing	PL4 7EG	PL4 7	CRM	90	
Ocean House	Existing	PL1 2DG	PL1 2	CleveStudentLets	68	
Gull House	Existing	PL4 6HB	PL4 6	CleveStudentLets	59	
The Court House	Existing	PL4 7JY	PL4 7	Primo	65	
Coomestone House	Existing	PL1 5BA	PL1 5	CleveStudentLets	45	
Marjon	Existing	PL6 8BH	PL6 8		456	
Peninsula	Compete	PL6 8BD	PL6 8		123	
Fox House	Existing	PL1 2DH	PL1 2	CleveStudentLets	30	
Belgrave House	Existing	PL4 6JJ	PL4 6	DreProperties	30	
Clubhouse	Existing	PL4 6LD	PL4 6	Clubhouse	30	
Grove House	Existing	PL4 7DL	PL4 7	CleveStudentLets	26	
Armada House	Existing	PL1 1JU	PL1 1	Aspire	24	
Valletort House	Existing	PL1 5AH	PL1 5		22	
Town House	Existing	PL1 5BN	PL1 5	CleveStudentLets	16	
Other accommodation (PCC)	Existing	Various	Unknown		510	
					Subtotal Existing	5,420
Beckley Point	Existing New	PL1 1LD	PL1 1	StudentHousingComp	507	
Mary Parker House	Existing New	PL4 6PJ	PL4 6	CRM	164	
Royal House	Existing New	PL1 1DN	PL1 1	CleveStudentLets	82	
Aspire	Existing New	PL1 1SD	PL1 1	Aspire	79	
Tamar House (St Andrews Cross)	Existing New	PL1 4HJ	PL1 4	CleveStudentLets	56	
Green Bank (Beaumont Sq)	Existing New	PL4 9EN	PL4 9		45	
					Subtotal Existing (New)	933
Crescent Point	Under-construction	PL1 2RQ	PL1 2		348	
Derry's	Under-construction	PL1 1HA	PL1 1		462	
Belgrave Snooker	Under-construction	PL4 7DP	PL4 7		43	
					Subtotal under-construction	853
Money Centre	Planning Approved	PL1 1DP	PL1 1		554	
Mayflower House	Planning Approved	PL1 1QJ	PL1 1		490	
Good Companions	Planning Approved	PL1 1QJ	PL1 1		267	
47a North Road East	Planning Approved	PL4 6AY	PL4 6		39	
Reservoir house	Planning Approved	PL4 8EZ	PL4 8		66	
Bedford Villa, Amity Place	Planning Approved	PL4 8LX	PL4 8		6	
50 Ebrington Street	Planning Approved	PL4 9AF	PL4 9		8	
					Subtotal Planning Approved	1,430
					Total	8,636

3. Appendix 3 – Map of central student area



<https://www.plymouth.gov.uk/sites/default/files/Postcode%20sector%20as%20at%20100817.jpg>

Sector Code	Beds				Total
	Existing	Recently complete	Under-construction	Planning approved	
PL1 1	540	668	462	1311	2981
PL1 2	617	0	348	0	965
PL1 4	0	56	0	0	56
PL1 5	83	0	0	0	83
PL4 6	605	164	0	39	808
PL4 7	427	0	43	0	470
PL4 8	1576	0	0	72	1648
PL4 9	483	45	0	8	536
PL6 8	579	0	0	0	579
Unknown	510	0	0	0	510
Total	5420	933	853	1430	8636



● North Hill

4: City Centre

7: Devonport

8: East End

14: Ford

16: Greenbank & university

22: Lispon & Laira

24: Morice Town

25: Mount Gould

26: Mutley

28: Peverell & Hartley

33: Stoke

34: Stonehouse

**4. Appendix 4 - Local Authorities that have Article 4 directions restricting HMOs**

1	Ashford Borough Council
2	Basingstoke and Deane Borough Council
3	Bath and North East Somerset Council
4	Birmingham City Council
5	Blackburn and Darwen Borough Council
6	Bournemouth Borough Council
7	Brighton and Hove City Council
8	Bristol City Council
9	Canterbury City Council
10	Charnwood Borough Council
11	Cheshire West and Cheshire
12	City of York
13	Cornwall Council
14	Coventry City Council
15	Crawley Borough Council (Comes into force 1st October 2017)
16	Daventry District Council
17	Durham County Council
18	Exeter City Council
19	Great Yarmouth Borough Council
20	Harlow Council
21	Hastings Borough Council
22	Hull City Council
23	London Borough of Barking and Dagenham
24	London Borough of Barnet
25	London Borough of Haringey
26	London Borough of Havering
27	London Borough of Hillingdon
28	London Borough of Hounslow
29	Leeds City Council
30	Leicester City Council
31	Lincoln City Council
32	Manchester City Council
33	Milton Keynes Council
34	Newcastle upon Tyne City Council
35	Newcastle-under-Lyme Council
36	Northampton Borough Council
37	Nottingham City Council
38	Oxford City Council
39	Plymouth City Council
40	Portsmouth City Council
41	Preston City Council
42	Rother District Council
43	Sheffield City Council
44	South Somerset District Council
45	South Tyneside Metropolitan Borough Council



46	Southampton City Council
47	Stevenage Borough Council (Comes into force 20th September 2017)
48	Sunderland City Council
49	Tendring District Council
50	Thanet District Council
51	Tunbridge Wells Borough Council
52	Walsall Metropolitan Borough Council
53	Warwick District Council
54	Waveney District Council
55	Welwyn Hatfield Council
56	West Lancashire District Council
57	Winchester City Council
58	Worcester City Council
59	York City Council